



COMDTPUB 16700.4
NVIC XX-06

NAVIGATION AND VESSEL INSPECTION CIRCULAR NO. XX-06

Subj: MEDICAL AND PHYSICAL EVALUATION GUIDELINES FOR MERCHANT MARINER CREDENTIALS

Ref: (a) International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, as amended (STCW)
(b) 46 United States Code, Subtitle II, Part E
(c) 46 Code of Federal Regulations (CFR) Subpart B
(d) 46 CFR Parts 401 and 402
(e) COMDTINST M16000.8B, Marine Safety Manual (MSM), Vol. III, Chapter 4

1. PURPOSE. This Circular provides guidance for evaluating the physical and medical conditions of applicants for merchant mariner's documents (MMD), licenses, certificates of registry and STCW endorsements, collectively referred to as "credential(s)." This Circular also provides guidance for evaluating the physical and medical conditions of applicants for merchant mariner credentials (MMC), if/when the Coast Guard begins issuing MMC as proposed in 71 FR 29462 (2006). The guidance in this document should assist medical examiners, the maritime industry, individual mariners and Coast Guard personnel in evaluating a mariner's physical and medical status to meet the requirements of references (a) – (d). This guidance is not a substitute for applicable legal requirements, nor is it itself a rule. It is not intended to, nor does it impose, legally-binding requirements on any party.

a. Coast Guard practices with respect to the physical and medical evaluation process have considerably evolved, consistent with developments and advancements in modern medical practices, since NVIC 2-98 was published in 1998. This Circular replaces the outdated NVIC 2-98. It puts the current Coast Guard practices into writing, making them transparent for all to see and promoting their consistent application. It is not intended to, and it in fact does not, change current Coast Guard practices with respect to the physical and medical evaluation process.

2. ACTION. Medical personnel who conduct examinations of applicants for credentials, and Coast Guard personnel who review applications for credentials should use the information in

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this NVIC to determine if applicants are physically and medically qualified to hold the credential(s) being requested.

3. **DIRECTIVES AFFECTED.** NVIC 2-98 and NMC Policy Letters 11-98 and 4-99 are canceled. Reference (e) has not been updated since 1999, and it may contain some information that conflicts with the guidance in this NVIC. Until reference (e) is updated, the guidance in this NVIC supersedes reference (e) in any areas where they may conflict.
4. **BACKGROUND.**
 - a. Reference (a) requires each party to establish standards of medical fitness for seafarers. References (b) and (c) require that mariners be physically able to perform their duties, using terms such as “general physical condition,” “good health” and “of sound health.” Reference (d) contains special requirements for registration as a Great Lakes Pilot, including the requirement to “pass a physical examination given by a licensed medical doctor.” None of these references contain specific standards, with the exception of visual acuity and color vision, for determining if mariners are physically and medically qualified.
 - b. Due to the lack of specificity in references (a) – (d), the physical and medical standards upon which credential applicants are evaluated – and the medical tests and other information needed to make these evaluations - may be unclear, leading to confusion and unnecessary delays. This may also lead to inconsistent evaluations by medical practitioners conducting examinations of credential applicants, and ultimately by Coast Guard personnel determining whether credentials should be issued.
 - c. This NVIC details the specific medical conditions that may be potentially disqualifying for service, and the data required for evaluation of each of these conditions to determine fitness for service. It also details physical ability demonstration guidelines, and acceptable vision and hearing standards. It is not possible to incorporate the detailed specificity of this NVIC into references (a) – (d) due to the nature of the international, legislative and regulatory processes; however, this detailed specificity is necessary to reduce the subjectivity of the physical and medical evaluation process and promote more consistent evaluations. It will also reduce the time required to process credential applications by helping eliminate the guesswork that mariners may currently encounter as to what specific physical and medical information needs to be submitted to process their applications.
 - d. The information contained in this NVIC does not change current Coast Guard practices with respect to the physical and medical evaluation process. It reduces the current practices to writing, making them transparent for all to see. As such, it is not anticipated that this NVIC will result in higher rates of disqualification for service, nor in increased processing time for credential applications with physical and/or medical issues. To the contrary, as explained above, the Coast Guard expects the process to be fairer and less subjective, and we anticipate application processing time to be reduced because all parties will know precisely what information is needed at the outset of the application process.

5. DISCUSSION.

- a. This NVIC is a resource to assist medical personnel in obtaining appropriate medical histories from credential applicants, and in performing examinations of applicants. It provides guidance on conditions that are potentially disqualifying for issuance of credentials and the appropriate supplemental tests and evaluations for requesting waivers for disqualifying conditions. Healthcare providers should limit comments and recommendations to the ability of applicants to meet the standards. The final determination regarding issuance of all credentials lies with the Coast Guard.
- b. Sea service may be arduous and impose unique physical and medical demands on mariners. The public safety risks associated with sudden incapacitation of mariners on vessels are significant. In the event of an emergency, immediate response may be limited to a vessel's crew, and outside help may be delayed. Mariners must be medically and physically fit to perform their duties not only on a routine basis but also in an emergency.
- c. This NVIC has been developed by Coast Guard medical officers in consultation with experienced maritime community medical practitioners. This document reflects a synthesis of their recommendations, the requirements in references (a) – (d), and the recommendations of other Federal transportation mode authorities as to appropriate physical and medical standards.
- d. Enclosure (1) provides medical certification standards guidance. It lists the standards that apply to applicants for each of the various types of credentials.
- e. Enclosure (2) provides guidance for determining if mariners are physically able to perform their duties. For purposes of this NVIC, a medical condition is considered to cause “significant functional impairment” if it impairs the ability of the applicant to fully perform all of the physical abilities listed in this enclosure, or if it otherwise interferes with the ability of the applicant to fully perform the duties and responsibilities of the requested credential.
- f. Enclosure (3) contains a list of potentially disqualifying medical conditions, medications and supplemental medical data to be submitted for medical review.
- g. Enclosure (4) contains guidance for evaluating vision and hearing.
- h. Enclosure (5) describes the medical review process.
- i. Applicants for credentials should utilize form CG-719K, *Merchant Mariner Physical Examination Report*, or form CG-719K/E, *Merchant Marine Certification of Fitness for Entry Level Ratings*, as appropriate. Use of an equivalent form is acceptable if it includes the same information; however, an equivalent form should be submitted to the National Maritime Center (NMC) for review prior to use. Submission of inadequate information will result in processing delays. Medical examiners should review and initial each page of the form. Forms and information about the medical review process are available on the NMC website at: <http://www.uscg.mil/STCW/>.

- j. Some individuals may have conditions or limitations that are not listed which would render them incapable of performing their duties. Others with a listed condition or limitation may be quite capable of working at sea without posing a risk to the ship, their shipmates, or themselves. Any cause for rejection is disqualifying only while the condition persists or is likely to cause sudden incapacitation. While each applicant must be evaluated individually, the conditions described in this document are those which the Coast Guard considers potentially disqualifying. They require medical review in accordance with enclosure (5) before a credential can be issued.
- k. In situations where the applicant does not meet the guidance herein, but is still able to function effectively and perform all regular and emergency duties, the Officer in Charge, Marine Inspection (OCMI) may recommend to the NMC that a waiver be granted. Supplemental medical records, consultations, and test results prescribed in enclosure (3) should be submitted with the waiver request. Unless specifically authorized in enclosures (4) & (5), all waiver requests must be reviewed by the NMC.
- l. Maritime academies should ensure that new entrants into a cadet program are physically and medically qualified. A cadet with a potentially disqualifying condition should be advised that he or she may not be physically or medically eligible upon graduation to receive a credential. Medical staff at an academy may consult with the NMC about potentially disqualifying conditions. While a final determination cannot be made until an application is submitted near graduation, the NMC can advise that based on the cadet's present condition, a waiver would probably (or probably not) be granted if he or she were applying for a credential at the present time.
- m. Marine employers shall maintain the medical records required by 46 CFR 15.1107.
- n. Nothing in this NVIC precludes marine employers from establishing more rigorous medical or physical ability standards to promote or ensure the safety of life, property and the marine environment.

Enclosures: (1) Medical Certification Standards
(2) Physical Ability Standards
(3) Potentially Disqualifying Medical Conditions and Medications
(4) Vision and Hearing Standards
(5) Medical Review Process

Non-Standard Distribution:

B:a G-PSO(1); G-PCV(1); G-PCQ(1); G-PWM(1); CG-11(1); CGPC(1); Ap(1); Pp(1)
C:e New Orleans(20); Boston(10); Charleston(10); Houston-Galveston(10); Miami(10);
Memphis(10); Toledo(10); Long Beach(10); San Francisco Bay(10); Portland(10); Puget
Sound(10); Honolulu (10); Juneau(5); Anchorage(5); St. Louis(5)
C:n New York(10); Baltimore(10)
D:l Maritime Administration; Military Sealift Command

MEDICAL CERTIFICATION STANDARDS

This table lists the standards that apply to applicants for each of the various types of credentials. If more than one credential is applied for at the same time, the most stringent of the requirements that apply to each credential should prevail.

CREDENTIAL APPLIED FOR: (ORIGINAL, RAISE IN GRADE OR RENEWAL)	Demonstration of Physical Ability	General Medical Exam	Vision & Hearing Standards	Form
	Enclosure (2)	Enclosure (3)	Enclosure (4)	
ALL DECK OFFICERS, INCLUDING PILOTS, REGARDLESS OF ROUTE, TONNAGE OR VESSEL TYPE	YES	YES	YES	CG-719K
ALL ENGINEERING OFFICERS, REGARDLESS OF ROUTE, TONNAGE, VESSEL TYPE, PROPULSION MODE OR PROPULSION POWER	YES	YES	YES	CG-719K
RADIO OFFICERS	YES	YES	YES	CG-719K
OFFSHORE INSTALLATION MANAGER, BARGE SUPERVISOR OR BALLAST CONTROL OPERATOR	YES	YES	YES	CG-719K
ENTRY-LEVEL RATING (Ordinary Seamen, Wiper & Steward's Department Food Handler) VALID FOR SERVICE ON SEAGOING VESSELS OF 200 GROSS REGISTER TONS OR MORE ^{1, 2, 3, 4, 5}	YES	NO	NO	CG-719K/E (CG-719K may be substituted)
ENTRY-LEVEL RATING (Ordinary Seamen, Wiper & Steward's Department Food Handler) LIMITED TO SERVICE ON NON-SEAGOING VESSELS AND/OR ON SEAGOING VESSELS OF LESS THAN 200 GROSS REGISTER TONS ^{1, 2, 5}	NO	NO	NO	N/A
QUALIFIED RATING (Able Seaman, QMED and Tankerman) ⁵	YES	YES	YES	CG-719K
LIFEBOATMAN VALID FOR SERVICE ON SEAGOING VESSELS OF 200 GROSS REGISTER TONS OR MORE, INCLUDING CERTIFICATION AS PROFICIENT IN SURVIVAL CRAFT UNDER STCW VI/2 ^{2, 3, 4}	YES	NO	NO	CG-719K/E (CG-719K may be substituted)
LIFEBOATMAN LIMITED TO SERVICE ON NON-SEAGOING VESSELS AND/OR ON SEAGOING VESSELS OF LESS THAN 200 GROSS REGISTER TONS ²	NO	NO	NO	N/A

<p>CADET, STUDENT OBSERVERS, APPRENTICE ENGINEER AND APPRENTICE MATE VALID FOR SERVICE ON SEAGOING VESSELS OF 200 GROSS REGISTER TONS OR MORE^{2,3}</p> <p>STCW ENDORSEMENT FOR GMDSS AT-SEA MAINTAINER (certified under STCW Regulation IV/2) VALID FOR SERVICE ON VESSELS SUBJECT TO STCW⁴</p> <p>STCW ENDORSEMENT FOR PERSONS DESIGNATED TO PROVIDE MEDICAL CARE ONBOARD SHIP (certified under STCW Regulation VI/4), VALID FOR SERVICE ON VESSELS SUBJECT TO STCW⁴</p>	YES	NO	NO	CG-719K/E (CG-719K may be substituted)
<p>CADET, STUDENT OBSERVERS, APPRENTICE ENGINEERS AND APPRENTICE MATE LIMITED TO SERVICE ON NON-SEAGOING VESSELS AND/OR ON SEAGOING VESSELS OF LESS THAN 200 GROSS REGISTER TONS²</p>	NO	NO	NO	N/A
<p>RATING FORMING PART OF A NAVIGATIONAL WATCH (RFPNW) AND RATING FORMING PART OF AN ENGINEERING WATCH (RFPEW), VALID FOR SERVICE ON VESSELS SUBJECT TO STCW⁴</p> <p>ALL OTHER STCW ENDORSEMENTS, VALID FOR SERVICE ON VESSELS SUBJECT TO STCW⁴</p>	YES	YES	YES	CG-719K

NOTE: 1. Food Handlers: Applicants for ratings authorizing the handling of food are required to produce a certificate from a physician stating that they are free from communicable disease. A current list of relevant communicable diseases is available on the NMC internet website at: <http://www.uscg.mil/STCW/>. This may, but is not required, to be documented on a CG-719K. At the certifying physician's discretion, it may be documented in any format, including letterhead, from the physician certifying that the applicant is disease free. See 46 CFR 12.25-20.

2. "Seagoing vessel" means a self-propelled vessel in commercial service that operates beyond the Boundary Line established by 46 CFR Part 7. It does not include a vessel that navigates exclusively on inland waters. See 46 CFR 15.1101.

3. 46 CFR 12.02-17(e) requires applicants for merchant mariners' documents who will be serving on seagoing vessels of 200 gross register tons or more to provide a "document issued by a medical practitioner attesting the applicant's medical fitness to perform the functions for which the document is issued." Enclosure (2) satisfies this requirement. Applicants may meet this requirement by submitting a CG-719K/E or approved equivalent form.

4. See 46 CFR 10.202(k), 12.02-7(f), 15.103(d)-(g) & 15.1103 for applicability of STCW. See also NVIC 7-00, "Clarification of the Application of STCW, 1978, As Amended, To Vessels Less Than 200 Gross Register Tons (GRT)."

5. Staff Officers: Applicants for certificates of registry are required to hold an MMD (entry level rating or qualified rating), and they are required to satisfy the physical/medical requirements of that MMD, if any. See 46 CFR 10.805(b). See also paragraph # 2 on next page for certificates of registry for staff officers.

GENERAL MEDICAL CERTIFICATION STANDARDS

1. **STCW ENDORSEMENTS.** An exam meeting the standards in enclosures (2), (3) and (4) satisfies the STCW requirements for medical fitness. No exam is necessary for an STCW endorsement if the applicant has already completed an exam meeting the standards in enclosures (2), (3) and (4) for the credential underlying the STCW endorsement. For example, an AB who applies for an RFPNW endorsement two years after being issued his/her AB MMD need not complete another exam. An ordinary seaman (OS) who applies for an RFPNW endorsement two years after being issued his/her OS MMD should complete an exam meeting the standards in enclosures (2), (3) and (4) (on a CG-719K or approved equivalent form) if the exam he/she previously completed to obtain his/her OS MMD only met the standards in enclosure (2) (on a CG-719K/E or approved equivalent form).
2. **CERTIFICATES OF REGISTRY FOR STAFF OFFICERS.** In accordance with 46 CFR 10.805(b), applicants for certificates of registry are required to hold an MMD. Although there are no specified physical or medical requirements for certificates of registry, applicants are required to satisfy the physical/medical requirements of the underlying MMD, if any.
3. **RENEWAL OF LICENSES.** In accordance with 46 CFR 10.209(d), applicants for renewal of all licenses must submit certification by a licensed physician, physician's assistant, or nurse practitioner that they are in good health and have no physical impairment or medical condition which would render them incompetent to perform the ordinary duties of the license(s). This certification must address visual acuity and hearing in addition to general physical condition, and must have been completed within the previous 12 months from the date of renewal application. Applicants may meet these requirements by submitting a completed CG-719K or approved equivalent form.
4. **RAISE IN GRADE OF LICENSES.** In accordance with 46 CFR 10.207(e), applicants for raise in grade of a license who have not had a physical examination for an original license or renewal of a license within the previous 3 years (from the date of application for the raise in grade) must submit a certification by a licensed physician, physician assistant, or nurse practitioner that he or she is in good health and has no physical impairment or medical condition which would render him or her incompetent to perform the ordinary duties of the license(s) applied for. Applicants may meet these requirements by submitting a completed CG-719K or approved equivalent form. There are no physical requirements for raise in grade of licenses if the applicant had a physical examination for an original license or renewal of a license within the previous 3 years from the date of application for the raise in grade.
5. **RENEWAL OF QUALIFIED RATINGS.** In accordance with 46 CFR 12.02-27(d), applicants for renewal of MMDs endorsed with qualified ratings of AB, QMED and Tankerman must submit certification by a licensed physician, physician's assistant, or nurse practitioner that he or she is in good health and has no physical impairment or medical condition which would render him or her incompetent to perform the ordinary duties of that qualified rating(s). This certification must address visual acuity and hearing in addition to general physical condition, and must have been completed within the previous 12 months from the date of renewal application. Applicants may meet these requirements by submitting a completed CG-719K or approved equivalent form.

6. An applicant must be physically capable of performing his or her duties at all times, not just when standing a watch. A mariner may be called for duty at any time in response to an emergency or to operational demands. A mariner who may be fit for duty under ordinary circumstances, but who when off duty must take medication that would affect his or her ability to react if called for an emergency or extraordinary duty, should not be considered as fit for duty.
7. Herbal supplements and over-the-counter (OTC) medications may interact with prescription drugs or cause hazardous side effects on their own. Medical practitioners should question applicants about their use of these substances and any usage should be noted on the report of physical examination. Side effects, if any, should also be noted. Vessel operators should publicize to their employees that OTC medications and dietary supplements (vitamins, herbal supplements) may impair their ability to perform their duties. Use of these substances should require notification of the master or home office if they are being used. Vessel operators should publish company policy for their employees about reporting of illness, use of medications (prescription or OTC), or using other substances that may impair their ability to perform their duties. See paragraph 5 of enclosure (3).
8. Short-term conditions may render a mariner not physically or medically competent at the time of application, even though the condition is being appropriately treated and will be of relative short duration. An example of this would be a broken arm. In these circumstances, the OCMII may issue or renew a credential, provided the applicant immediately deposits the credential with the Coast Guard until he or she meets the physical and medical standards. See 46 CFR 5.201.
9. For conditions that are under treatment but a lengthy period of recovery is likely, the mariner should renew the credential for continuity purposes to retain validity and avoid having to re-initiate the entire application process, which may include retaking the complete examination. When the mariner recovers to the point where he or she is medically fit or may be considered for a waiver, the mariner may apply for restoration of full operating authority. Original credentials should not be issued until the applicant has totally recovered or recovered to an extent where he or she may be granted a medical waiver.
10. All exams, tests and demonstrations must be performed, witnessed or reviewed by a physician, physician assistant, or nurse practitioner licensed by a state in the U.S., a U.S. possession, or a U.S. territory. Foreign medical licenses are not acceptable. A chiropractor or a naturopathic doctor is not accepted under current regulations. All applicants who require a general medical exam must be physically examined. Medical exams based solely on documentary review, and/or patient history review, are unacceptable.
11. FIRST CLASS PILOTS AND THOSE INDIVIDUALS “SERVING AS” PILOTS
 - a. 46 CFR 10.709 requires that every licensed first class pilot serving as a pilot on a vessel of 1600 GRT or more shall have a thorough physical examination each year while holding the first class pilot license or endorsement, and that this physical examination must meet the same requirements for originally obtaining the license or endorsement as specified in 46 CFR 10.205(d). 46 CFR 15.812 (b)(3) & (c) require that other licensed individuals who “serve as” pilots on certain types of vessels must have a current physical examination in accordance with the provisions of 46 CFR 10.709.¹ A physical examination meeting the standards in enclosures (2), (3) and (4) satisfies these regulatory requirements.

- b. 46 CFR 10.709 also requires that first class pilots on vessels of 1600 GRT or more shall provide the Coast Guard with copies of their most recent physical examination upon request. This includes those individuals who “serve as” pilots in accordance with 46 CFR 15.812(b)(3) & (c). The Coast Guard published a notice in the Federal Register on _____ which constitutes the request, under 46 CFR 10.709(e), to require all first class pilots on vessels greater than 1600 GRT, and all other individuals who “serve as” pilots in accordance with 46 CFR 15.812(b)(3) & (c), to provide a copy of their annual physical examination to the Coast Guard. [See FR Cite] The report of physical examination should be submitted to the Regional Examination Center (REC) which issued the current license. The report of physical examination will be reviewed in accordance with this NVIC.
- c. First class pilots, and all other individuals who “serve as” pilots in accordance with 46 CFR 15.812(b)(3) & (c), should annually submit a CG-719K or approved equivalent form to meet this requirement. This should be submitted to the Coast Guard no later than 30 calendar days after completion of the physical examination each year. The annual physical examination must, in accordance with 46 CFR 10.709(d), be completed within 30 calendar days of the anniversary date of the individual’s most recent satisfactorily completed physical examination.
- d. The Coast Guard may initiate appropriate administrative action in the event any first class pilot - or any other individual “serving as” a pilot (as described above) - does not meet the physical examination requirements specified in Title 46 CFR 10.205(d), up to and including suspension or revocation of the mariner’s credential in accordance with 46 CFR Part 5. The Coast Guard may also initiate appropriate administrative action, up to and including suspension or revocation of the mariner’s credential in accordance with 46 CFR Part 5, if any first class pilot - or any other individual “serving as” a pilot - fails to submit their annual physical examination to the Coast Guard.
- e. Individuals with pilot licenses, pilot endorsements, master licenses and mate licenses (and individuals applying for those credentials) who do not in fact serve as a first class pilot or otherwise “serve as” a pilot in accordance with 46 CFR 15.812(b)(3) & (c) are not required to submit an annual physical examination to the Coast Guard; however, these individuals must submit an annual physical examination before serving as a first class pilot or otherwise “serving as” a pilot in accordance with 46 CFR 153812(b)(3) & (c).

12. GREAT LAKES PILOTS

- a. Application for original or renewal registration as a Great Lakes Registered Pilot must be made on Form CG-4509. See 46 CFR 401.200(a). Only the "Application for Registration" portion (pages one & two) is needed to meet this requirement. The Director, Office of Great Lakes Pilotage at Coast Guard Headquarters (Director) has now designated CG-719K as the required form for physical examinations replacing the previous requirement to use page 3 of CG-4509.
- b. A Great Lakes Registered Pilot must be “physically competent to perform the duties of a U.S. Registered Pilot and meet the medical requirements prescribed by the Commandant.” See 46 CFR 401.210(a)(4). The annual physical examination required by 46 CFR 402.210(a) must be reported “on the form furnished by the Director” and must be given by a “licensed medical

doctor”. A CG-719K submitted annually to the Director will satisfy all original, renewal and annual physical reporting requirements. The Director will transfer the CG-719K to any other Coast Guard offices requiring the form for reporting and/or credentialing purposes. It is incumbent upon a Great Lakes Registered Pilot to inform the Director of a debilitating medical condition that develops between annual examinations.

- c. The Director may suspend and/or revoke or refuse to register or renew a Great Lakes Registered Pilot’s registration when that Pilot does not continuously meet the standards of this NVIC. See 46 CFR 401.210(a), §401.240 & 401.250. Evidence obtained from any physical examination may be used by the Coast Guard to suspend and/or revoke any underlying credential in accordance with 46 CFR Part 5.

ⁱ Individuals who “serve as” pilots on vessels of not more than 1600 GRT in accordance with 46 CFR 15.812(b)(2) do not have an annual physical examination requirement.

DRAFT

PHYSICAL ABILITY STANDARDS

1. Credential applicants must be physically able to perform assigned shipboard functions and meet the physical demands that would reasonably arise during an emergency response. As used in this context, an “*emergency response*” refers to emergency evolutions such as abandon ship and firefighting, and the basic procedures to be followed by each mariner.
2. If the examining medical practitioner doubts the applicant’s ability to meet any of the standards contained within this table, a suitable practical demonstration should be required. The results of the practical demonstration should be attached to the completed credential application. All practical demonstrations should be performed by the applicant without outside assistance. Any prosthesis normally worn by the applicant and other aid devices such as prescription glasses may be used by the applicant in all practical demonstrations except when the use of such would prevent the proper wearing of mandated personal protective equipment (PPE). If the examining medical practitioner is unable to perform the practical demonstration, the applicant should be referred to a competent evaluator of physical ability such as a licensed physical therapist or licensed occupational therapist. The results of such evaluation should be attached to the completed credential application.
3. If the applicant is unable to meet any of the standards contained within this table, the examining medical practitioner should provide information on the degree or severity of the applicant’s inability to meet the standards.
4. This table describes ordinary shipboard tasks, functions, events and conditions and related physical abilities considered necessary for performing shipboard and emergency response functions.
5. Applicants with physical limitations who do not meet the related physical ability guidelines contained in this table may be issued a credential with appropriate limitations upon subsequent evaluation by the NMC. Any prosthesis or similar device used to successfully meet the physical standards should be noted on the credential(s), along with a requirement that the individual must use the prosthesis or similar device while acting under the authority of the credential(s).
6. Nothing in this NVIC precludes marine employers from establishing more rigorous physical ability standards to promote or ensure the safety of life, property and the marine environment.

SHIPBOARD TASKS, FUNCTION, EVENT OR CONDITION:	RELATED PHYSICAL ABILITY:	THE EXAMINER SHOULD BE SATISFIED THAT THE APPLICANT:
Routine movement on slippery, uneven and unstable surfaces.	Maintain balance (equilibrium).	Has no disturbance in sense of balance.
Routine access between levels.	Climb up and down vertical ladders and stairways.	Is able, without assistance, to climb up and down a 16 feet (4.9 meters) vertical ladder. Climb up and down three sets of 8 feet (2.4 meters) high inclined stairs. Does not have an impairment or disease that could prevent his/her normal movement and physical activities.
Routine movement between spaces and compartments.	Step over high door sills and coamings, and move through restricted accesses.	Is able, without assistance, to step over a door sill or coaming of 24 inches (61 centimeters) in height. Able to move through a restricted opening of 24 inches by 24 inches (61 centimeters by 61 centimeters). Does not have an impairment or disease that could prevent his/her normal movement and physical activities.
Open and close watertight doors; hand cranking systems, open/close valve wheels.	Manipulate mechanical devices using manual and digital dexterity, and strength.	Is able, without assistance, to open and close watertight doors that may weigh up to 55 pounds (25 kilograms). Must be able to move hands/arms to open and close valve wheels in vertical and horizontal directions; rotate wrists to turn handles. Reach above shoulder height. Does not have an impairment or disease that could prevent his/her normal movement and physical activities.
Handle ship's stores.	Lift, pull, push and carry a load.	Is able, without assistance, to lift at least a 40 pound (18.1 kilogram) load off the ground, and to carry, push or pull the same load a distance of 200 feet (61 meters). Does not have an impairment or disease that could prevent normal movement and physical activities.

SHIPBOARD TASKS, FUNCTION, EVENT OR CONDITION:	RELATED PHYSICAL ABILITY:	THE EXAMINER SHOULD BE SATISFIED THAT THE APPLICANT:
General vessel maintenance.	Crouch (lowering height by bending knees); kneel (placing knees on ground); and stoop (lowering height by bending at the waist). Use hand tools such as spanners, valve wrenches, hammers, screwdrivers, pliers.	Is able, without assistance, to grasp, lift and manipulate various common shipboard tools. Does not have an impairment or disease that could prevent his/her normal movement and physical activities.
Emergency response procedures, including escape from smoke-filled spaces.	Crawl (the ability to move the body with hands and knees); feel (the ability to handle or touch to examine or determine differences in texture and temperature).	Is able, without assistance, to crawl a distance of at least 16 feet (4.9 meters), and to distinguish differences in texture and temperature by feel. Does not have an impairment or disease that could prevent his/her normal movement and physical activities.
Stand a watch for a minimum of four hours.	Stand a watch for a minimum of four hours.	Is able, without assistance, to stand on feet for up to four hours with minimal rest periods, and to walk a distance of at least 400 feet (122 meters) at a pace of not less than 5 feet (1.5 meters) per second. Does not have an impairment or disease that could prevent his/her normal movement and physical activities.
React to visual alarms and instructions, emergency response procedures.	Distinguish an object or shape at a certain distance.	Fulfills the eyesight standards for the merchant mariner credential(s) applied for. <i>See footnote 1 of this table & enclosure (4) of this NVIC.</i>
React to audible alarms and instructions, emergency response procedures.	Hear a specified decibel (dB) sound at a specified frequency.	Fulfills the hearing capacity standards for the merchant mariner credential(s) applied for. <i>See footnote 1 of this table & enclosure (4) of this NVIC.</i>
Make verbal reports or call attention to suspicious or emergency conditions.	Describe immediate surroundings and activities, and pronounce words clearly.	Is capable of normal conversation.

SHIPBOARD TASKS, FUNCTION, EVENT OR CONDITION:	RELATED PHYSICAL ABILITY:	THE EXAMINER SHOULD BE SATISFIED THAT THE APPLICANT:
Participate in firefighting activities.	Be able to physically wear firefighting equipment including a self-contained breathing apparatus and carry/handle fire hoses and fire extinguishers.	<p>Is able, without assistance, to handle weights of at least 40 pounds (18.1 kilograms), pull an uncharged 2.5 inch (6.35 centimeter) diameter fire hose with nozzle 400 feet (122 meters), and lift a charged 2.5 inch (6.35 centimeter) diameter fire hose to fire fighting position.</p> <p>Does not have an impairment or disease that could prevent his/her normal movement and physical activities.</p>
Abandon ship.	Use survival equipment.	<p>Be able to physically put on a personal flotation device or exposure suit without assistance from another individual.</p> <p>Does not have an impairment of disease that could prevent his/her normal movement and physical activities.</p>

¹ The vision and hearing standards listed in Enclosure (4) are not applicable to entry level ratings, nor to cadet, student observer, apprentice engineer or apprentice mate ratings. As discussed in enclosure (1), examining medical practitioners should use form CG-719K/E to document their examination of applicants for these ratings. Examining medical practitioners should note any concerns with the eyesight and/or hearing capacity of applicants for these ratings on the CG-719K/E so that the Coast Guard can make an appropriate determination as to the fitness of the individual for the rating(s). Examining medical practitioners may attach additional sheets to the CG-719K/E for this purpose.

POTENTIALLY DISQUALIFYING MEDICAL CONDITIONS AND MEDICATIONS

1. Active Condition. If not specified as “history of” in this table, a condition must be currently active to be potentially disqualifying. For purposes of this enclosure, “active” means that the applicant is currently under treatment for the condition, or that the applicant is currently under observation for possible worsening or recurrence of the condition, or that the condition is currently present.
2. History. As used in this enclosure, the term “history of” means a previous diagnosis or treatment of a medical condition by a healthcare provider, even once in the applicant’s life. It includes all active and present medical conditions.
3. Significant Functional Impairment. As used in this enclosure, the term “significant functional impairment” means that the medical condition impairs the applicant’s ability to fully perform the physical abilities listed in enclosure (2), or that it otherwise interferes with ability of the applicant to fully perform the duties and responsibilities of the credential for which he or she applies.
4. General Disqualifying Conditions. Any medical condition or physical impairment not otherwise specified in this enclosure which may cause significant functional impairment or sudden incapacitation, or which might otherwise compromise shipboard safety, including required response in an emergency situation, may be considered disqualifying. Any medical condition or physical impairment not otherwise specified in this enclosure which may result in gradual deterioration of performance of duties, or which otherwise poses a threat to the health and safety of the applicant or others, may be considered disqualifying.
5. Medications, Vitamins and Dietary Supplements. Any medication, vitamin or dietary supplement not otherwise specified in this enclosure which might cause harmful side effects when taken alone, or in combination with other substances, may be considered disqualifying. For purposes of this enclosure, side effects are considered harmful if they may cause significant functional impairment or sudden incapacitation, or if they might otherwise compromise shipboard safety, including required response in an emergency situation. Side effects are also considered harmful if they may result in gradual deterioration of performance of duties, or might otherwise pose a threat to the health and safety of the applicant or others.
6. Alternate Evaluation Data. The Coast Guard may, at the sole discretion of the NMC, substitute alternate evaluation data for the evaluation data listed in this table to reflect changes in medical practice. Such a determination may be based upon the medical condition(s) in question, the equivalence of the alternate evaluation data to the listed evaluation data it is being substituted for, and any other factors deemed appropriate by the NMC.
7. Industry Standards. Nothing in this NVIC precludes marine employers from establishing more rigorous medical standards to promote or ensure the safety of life, property and the marine environment.

No.	MEDICAL CONDITION	EVALUATION DATA
HEAD, FACE, NECK, AND SCALP		
1	Fistula of neck, either congenital or acquired, including tracheotomy	Copies of all pertinent consultations, CT/MRI reports (and films, if available); plus if surgery has been done, copies of the operative and pathology reports; if malignant, an oncology evaluation as well.
2	Deformities of the face or head that may interfere with the proper fitting and wearing of respiratory protection	Copies of all pertinent consultations, CT/MRI reports (and films, if available) and quantitative respiratory fit testing; plus if surgery has been done, copies of the operative and pathology reports; if malignant, an oncology evaluation as well.
3	History of tumor within the last 5 years	Local expansion and impingement on adjacent structures is the initial manifestation of most of these tumors. The extensive resection and resultant loss of structures vital for speech, swallowing (and control of secretions) and equipment fit will be important post-therapy concerns in medical certification of affected mariners. Appropriate candidates for waiver are those mariners whose tumors have been completely removed in a manner that has not disturbed the surrounding structures needed to perform duties. Impairment of speech, secretion control, and equipment fit are not considered favorably for waiver. Radiation Therapy will significantly impair chances of waiver. Confirmation of the histology is necessary. In addition, documentation of return of function of "quality" speech, swallowing/control of secretions, and equipment fit are required.
MOUTH AND THROAT		
4	Any malformation or condition, including stuttering, that impairs voice communication	Administer the reading aloud test (RAT) to applicants as a standardized assessment of an individual's ability to communicate clearly in the English language, in a manner compatible with safe and effective maritime operations. The examining physician will consult with a local REC in questionable cases, who may evaluate the RAT by telephone.
EARS		
5	Acute or chronic disease that may disturb equilibrium	Document hearing loss, labyrinthine dysfunction, and facial nerve weakness or paralysis. Audiology (to include speech discrimination in each ear) and neurology evaluations are required. Surgical and pathology reports are also required if applicable.
6	Mastoid Fistula	Document hearing loss, labyrinthine dysfunction, and facial nerve weakness or paralysis. Audiology (to include speech discrimination in each ear) and otolaryngology evaluations are required. Surgical and pathology reports are also required if applicable.

No.	MEDICAL CONDITION	EVALUATION DATA
7	Mastoiditis, acute or chronic	Document hearing loss, labyrinthine dysfunction, and facial nerve weakness or paralysis. Audiology (to include speech discrimination in each ear) and otolaryngology evaluations are required. Surgical and pathology reports are also required if applicable.
8	History of Acoustic Neuroma	A request for waiver may be submitted 6 months after successful removal of the tumor provided the sequelae are within acceptable limits. Specifically, the tumor must have been 2.5 cm diameter or less; unilateral, postoperative vertigo must have completely resolved; and any damage to cranial nerves should allow full eye movement without strabismus or tracing deficit and acceptable mask sealing. Psychomotor performance should be within normal limits. Document hearing loss, labyrinthine dysfunction, and facial nerve weakness or paralysis. Audiology (to include speech discrimination in each ear), neurology and neurosurgery evaluations are required. Surgical and pathology reports are also required.
9	Otitis Externa that may progress to impaired hearing or become incapacitating	Document hearing loss, labyrinthine dysfunction, and facial nerve weakness or paralysis. Audiology (to include speech discrimination in each ear) and otolaryngology evaluations are required. Surgical and pathology reports are also required if applicable.
10	History of episodic disorders of dizziness or disequilibrium	Document hearing loss, labyrinthine dysfunction, and facial nerve weakness or paralysis. Audiology (to include speech discrimination in each ear) and neurology evaluations are required. Surgical and pathology reports are also required if applicable.
EYES, GENERAL		
11	Monocular vision	See Enclosure (4). Uncompensated monocular vision is generally not waiverable. Contact NMC for guidance. Note: applicant should be at best corrected visual acuity before evaluation.
12	Ophthalmic pathology reflecting a serious systemic disease (e.g., diabetic and hypertensive retinopathy)	Ophthalmology consultation, to include dilated fundus examination, legible drawings of bilateral optic discs noting mathematical estimates of the cup-to-disc ratio, and optic disc, report of slit lamp examination, visual field test battery, confirmation of the exclusion of underlying systemic pathology, confirmation that visual acuity meets standards, presence of color vision abnormalities, and gonioscopy.
13	Any other acute or chronic pathological condition of either eye or adnexa that interferes with the proper function of an eye	Ophthalmology consultation, to include dilated fundus examination, legible drawings of bilateral optic discs noting mathematical estimates of the cup-to-disc ratio, and optic disc, report of slit lamp examination, visual field test battery, confirmation of the exclusion of underlying systemic pathology, confirmation that visual acuity meets standards, presence of color vision abnormalities, and gonioscopy.

No.	MEDICAL CONDITION	EVALUATION DATA
14	Diplopia	Ophthalmology consultation, to include dilated fundus examination, legible drawings of bilateral optic discs noting mathematical estimates of the cup-to-disc ratio, and optic disc, report of slit lamp examination, visual field test battery, confirmation of the exclusion of underlying systemic pathology, confirmation that visual acuity meets standards, presence of color vision abnormalities, and gonioscopy.
15	Pterygium occluding 50% of the cornea and affecting central vision	If less than 50% of the cornea and not affecting central vision; if more than 50% requires ophthalmology consultation, to include refraction measurement and visual acuity, corneal topography, slit lamp examination.
16	Refractive Surgery within past 6 months	Ophthalmology consultation, to include refraction measurement and visual acuity, corneal topography, slit lamp examination looking at the quantity, quality, and extent of incisions, contrast sensitivity testing. Provide completed, type and date of procedure, statement as to any adverse effects or complications (halo, glare, haze, rings, etc.).
17	Chorioretinitis; Coloboma	Ophthalmology consultation, to include dilated fundus examination, legible drawings of bilateral optic discs noting mathematical estimates of the cup-to-disc ratio, and optic disc, report of slit lamp examination, visual field test battery, confirmation of the exclusion of underlying systemic pathology, confirmation that visual acuity meets standards, presence of color vision abnormalities, and gonioscopy.
18	Corneal Ulcer or Dystrophy	Ophthalmology consultation, to include dilated fundus examination, legible drawings of bilateral optic discs noting mathematical estimates of the cup-to-disc ratio, and optic disc, report of slit lamp examination, visual field test battery, confirmation of the exclusion of underlying systemic pathology, confirmation that visual acuity meets standards, presence of color vision abnormalities, and gonioscopy.
19	Optic Atrophy or Neuritis	Ophthalmology consultation, to include dilated fundus examination, legible drawings of bilateral optic discs noting mathematical estimates of the cup-to-disc ratio, and optic disc, report of slit lamp examination, visual field test battery, confirmation of the exclusion of underlying systemic pathology to include neurology consultation to rule out multiple sclerosis, confirmation that visual acuity meets standards, presence of color vision abnormalities, and gonioscopy.
20	Retinal Degeneration or Detachment	Ophthalmology consultation, to include dilated fundus examination, legible drawings of bilateral optic discs noting mathematical estimates of the cup-to-disc ratio, and optic disc, report of slit lamp examination, visual field test battery, confirmation of the exclusion of underlying systemic pathology, confirmation that visual acuity meets standards, presence of color vision abnormalities, and gonioscopy.

No.	MEDICAL CONDITION	EVALUATION DATA
21	Retinitis Pigmentosa	Ophthalmology consultation, to include dilated fundus examination, legible drawings of bilateral optic discs noting mathematical estimates of the cup-to-disc ratio, and optic disc, report of slit lamp examination, visual field test battery, confirmation of the exclusion of underlying systemic pathology, confirmation that visual acuity meets standards, presence of color vision abnormalities, and gonioscopy.
22	Papilledema or Uveitis	Ophthalmology consultation, to include dilated fundus examination, legible drawings of bilateral optic discs noting mathematical estimates of the cup-to-disc ratio, and optic disc, report of slit lamp examination, visual field test battery, confirmation of the exclusion of underlying systemic pathology, confirmation that visual acuity meets standards, presence of color vision abnormalities, and gonioscopy. In addition provide applicable documentation regarding presence of associated diseases causing uveitis, such as sarcoidosis, ankylosing spondylitis, tuberculosis, syphilis and toxoplasmosis. These conditions should be excluded and the following initial studies should be completed: CXR, Syphilis Serology, PPD, Lyme serology, HLA B 27, Angiotensin Converting Enzyme, and ANA.
23	Glaucoma (treated or untreated)	<p>Waivers may be granted if visual field loss is minimal and IOP is controlled at normal levels without miotic drugs. Miotic drugs are incompatible with night operations due to the inability of the pupil to dilate to admit sufficient light. Ophthalmology consultation is required anytime there is one or more documented IOPs \geq 22 mmHg; there is an IOP difference between the eyes of 4 mmHg or greater; there is a optic nerve cup-to-disc ratio > 0.5 or an asymmetrical cup-to-disc ratio between the eyes with a difference of > 0.2; or a visual field deficit is suspected; and when there is a recent change of visual acuity, ocular trauma, uveitis, or iritis. Optometrist or ophthalmologist should confirm the IOP with applanation tonometry. Ophthalmology IOPs must be documented from a Goldman's applanation tonometer, not from a non-contact tonometer "puff test" or Tono-pen, and must be obtained in the AM and PM for two days. Consultation reports must include dilated fundus examination, legible drawings of bilateral optic discs noting mathematical estimates of the cup-to-disc ratio, and optic disc, report of slit lamp examination, visual field test battery, and gonioscopy. If a low IOP of 7 mm Hg or less is confirmed by Goldman applanation tonometry an ophthalmology consultation must be obtained.</p> <p>FOLLOW-UP: The IOP should be measured and the patient evaluated every 6 months by an ophthalmologist or optometrist for those mariners labeled with ocular hypertension or glaucoma suspect. Mariners with proven glaucoma should be evaluated quarterly at least for the first year of treatment unless the consultant ophthalmologist specifies less frequent.</p>

No.	MEDICAL CONDITION	EVALUATION DATA
24	Macular Degeneration	Ophthalmology consultation, to include dilated fundus examination, legible drawings of bilateral optic discs noting mathematical estimates of the cup-to-disc ratio, and optic disc, report of slit lamp examination, visual field test battery, confirmation of the exclusion of underlying systemic pathology, confirmation that visual acuity meets standards, presence of color vision abnormalities, and gonioscopy.
25	Macular Detachment	Ophthalmology consultation, to include dilated fundus examination, legible drawings of bilateral optic discs noting mathematical estimates of the cup-to-disc ratio, and optic disc, report of slit lamp examination, visual field test battery, confirmation of the exclusion of underlying systemic pathology, confirmation that visual acuity meets standards, presence of color vision abnormalities, and gonioscopy.
26	History of Tumors	Ophthalmology consultation, to include dilated fundus examination, legible drawings of bilateral optic discs noting mathematical estimates of the cup-to-disc ratio, and optic disc, report of slit lamp examination, visual field test battery, confirmation of the exclusion of underlying systemic pathology, confirmation that visual acuity meets standards, presence of color vision abnormalities, and gonioscopy.
27	Vascular Occlusion	Ophthalmology consultation, to include dilated fundus examination, legible drawings of bilateral optic discs noting mathematical estimates of the cup-to-disc ratio, and optic disc, report of slit lamp examination, visual field test battery, confirmation of the exclusion of underlying systemic pathology, confirmation that visual acuity meets standards, presence of color vision abnormalities, and gonioscopy.
28	Retinopathy	Ophthalmology consultation, to include dilated fundus examination, legible drawings of bilateral optic discs noting mathematical estimates of the cup-to-disc ratio, and optic disc, report of slit lamp examination, visual field test battery, confirmation of the exclusion of underlying systemic pathology, confirmation that visual acuity meets standards, presence of color vision abnormalities, and gonioscopy.
29	Disparity in size or reaction to light (afferent pupillary defect) or nonreaction to light in either eye, acute or chronic	Neurophthalmology consultation, to include dilated fundus examination, legible drawings of bilateral optic discs noting mathematical estimates of the cup-to-disc ratio, and optic disc, report of slit lamp examination, visual field test battery, confirmation of the exclusion of underlying systemic pathology, confirmation that visual acuity meets standards, presence of color vision abnormalities, and gonioscopy.

No.	MEDICAL CONDITION	EVALUATION DATA
30	Nystagmus	Neurology consultation. If nystagmus has been present for a number of years and has not recently worsened, it is usually necessary to consider only the impact that the nystagmus has upon visual acuity. If visual acuity is affected, submit ophthalmology consultation.
31	Synechiae, anterior or posterior	Ophthalmology consultation, to include dilated fundus examination, legible drawings of bilateral optic discs noting mathematical estimates of the cup-to-disc ratio, and optic disc, report of slit lamp examination, visual field test battery, confirmation of the exclusion of underlying systemic pathology, confirmation that visual acuity meets standards, presence of color vision abnormalities, and gonioscopy.
32	Absence of conjugate alignment in any quadrant	Ophthalmology consultation, to include any history of ambliopia (lazy eye) or diplopia, any patching of one/both eyes, or previous eye surgery, and include the following tests: full ocular muscle balance testing, Verhoeff vision testing apparatus (VTA), or Randot depth perception testing, testing for diplopia in the nine cardinal directions, pupillary exam, cover test (both near and far), alternate cover test, near point of convergence (NPC), red lens test, Maddox Rod test, Worth four-dot exam, and AO vectograph.
33	Inability to converge on a near object	Ophthalmology consultation, to include measurement of convergence insufficiency distance.
34	Paralysis with loss of ocular motion in any direction	Ophthalmology consultation, to include any history of ambliopia (lazy eye) or diplopia, any patching of one/both eyes, or previous eye surgery, and include the following tests: full ocular muscle balance testing, Verhoeff vision testing apparatus (VTA), or Randot depth perception testing, testing for diplopia in the nine cardinal directions, pupillary exam, cover test (both near and far), alternate cover test, near point of convergence (NPC), red lens test, Maddox Rod test, Worth four-dot exam, and AO vectograph.
LUNGS AND CHEST		
35	Frequent or severe asthmatic symptoms	Internal medicine and/or pulmonology consultation to include complete pulmonary function testing (PFT). Baseline, post bronchodilator, and methacholine/provocative testing results. Examiner statement on applicant's asthma severity class according to National Asthma Education and Prevention Program Expert Panel Report 2: Guidelines for the Diagnosis and Management of Asthma (http://www.nhlbi.nih.gov/health/prof/lung/asthma/practgde.htm) Examiner statement addressing any sudden severe exacerbations, severe persistent or moderate persistent asthma, any hospitalizations or intubations for exacerbations, or recurrent oral steroid

No.	MEDICAL CONDITION	EVALUATION DATA
		(cont'd) use for exacerbations. NOTE: Non-sedating antihistamines including loratadine or fexofenadine may be used while underway, after adequate individual experience has determined that the medication is well tolerated without significant side effects.
36	Chronic bronchitis, emphysema, or COPD	Internal medicine and/or pulmonology consultation to include pulmonary function testing (PFT) with bronchodilator challenge, chest x-ray or CT to exclude bullae, and EKG. Exercise stress ECG with pulse oximetry is required to assess pulmonary function during exertion if FVC or FEV1 are less than 75% predicted value.
37	Abscesses	Internal medicine and/or pulmonology consultation to include pulmonary function testing (PFT), imaging studies, if applicable, operative/pathology/microbiology studies, if applicable, current treatment, and documentation of resolution or stability of the condition.
38	Mycotic Disease	Internal medicine and/or pulmonology consultation to include pulmonary function testing (PFT), imaging studies, if applicable, operative/pathology/microbiology studies, if applicable, current treatment, and documentation of resolution or stability of the condition.
39	Tuberculosis or Untreated Latent Tuberculosis Infection (LTI)	Internal medicine and/or pulmonology consultation with documentation of complete recovery from infection, including post-convalescent negative sputum cultures, if applicable, CXR. NOTE: Applicants with LTI and no evidence of disease receiving treatment do not require a waiver. TB is not waiverable until 6 months after treatment is completed.
40	Fistula, Bronchopleural, to include Thoracostomy	Internal medicine and/or pulmonology consultation to include pulmonary function testing (PFT), imaging studies, if applicable, operative/pathology/microbiology studies, if applicable, current treatment, and documentation of resolution or stability of the condition.
41	Lobectomy with loss of functional capacity	Internal medicine and/or pulmonology consultation to include pulmonary function testing (PFT), copies of operative reports. Exercise stress ECG with pulse oximetry is required to assess pulmonary function during exertion if FVC or FEV1 are less than 75% predicted value.
42	Pulmonary Fibrosis	Internal medicine and/or pulmonology consultation to include pulmonary function testing (PFT), and imaging studies. Exercise stress ECG with pulse oximetry is required to assess pulmonary function during exertion if FVC or FEV1 are less than 75% predicted value.
43	Obstructive Sleep Apnea	Pulmonology consultation with polysomnography (PSG) to confirm diagnosis and post-treatment PSG to document improvement with therapy and/or surgery. The apnea/hypopnea index and respiratory distress index should be reported with the PSG. Copy of operative report if surgically treated. If surgically treated, post op PSG to confirm cure or need for further treatment.

No.	MEDICAL CONDITION	EVALUATION DATA
44	Acute fibrinous pleurisy	Internal Medicine and/or pulmonology consultation to include pulmonary function testing (PFT), imaging studies, if applicable, operative/pathology/microbiology studies, if applicable, current treatment, and documentation of resolution or stability of the condition. Exercise stress ECG with pulse oximetry is required to assess pulmonary function during exertion if FVC or FEV1 are less than 75% predicted value.
45	Empyema	Internal Medicine and/or pulmonology consultation to include pulmonary function testing (PFT), copies of operative reports, imaging studies, if applicable, operative/pathology/microbiology studies, if applicable, current treatment, and documentation of resolution or stability of the condition. Exercise stress ECG with pulse oximetry is required to assess pulmonary function during exertion if FVC or FEV1 are less than 75% predicted value.
46	Pleurisy with effusion	Internal Medicine and/or pulmonology consultation to include pulmonary function testing (PFT), imaging studies, if applicable, operative/pathology/microbiology studies, if applicable, current treatment, and documentation of resolution or stability of the condition. Exercise stress ECG with pulse oximetry is required to assess pulmonary function during exertion if FVC or FEV1 are less than 75% predicted value.
47	Pneumonectomy	Thoracic surgery consultation with current status report, CXR, PFTs, copies of operative reports. Exercise stress ECG with pulse oximetry is required to assess pulmonary function during exertion if FVC or FEV1 are less than 75% predicted value.
48	History of tumors or cysts of the lung, pleura or mediastinum within the last 5 years	Oncology consultation with current status report, CXR, PFTs, copies of operative reports if history of surgery. Exercise stress ECG with pulse oximetry is required to assess pulmonary function during exertion if FVC or FEV1 are less than 75% predicted value.
48a	History of tumors of the breast within the last 5 years	Oncology consultation with current status report, diagnostic imaging studies and copies of operative reports if history of surgery.
49	Sarcoid, if more than minimal involvement or if symptomatic	Internal Medicine and/or pulmonology consultation to include pulmonary function testing (PFT) with diffusion studies (e.g., DLCO), thallium exercise stress test, 24-hour Holter monitor. CBC, liver function tests, serum electrolytes, ACE, ESR, transaminase, serum calcium and phosphorous, and 24-hour urinary calcium. PA and lateral chest x-ray (within 6 months) and a chest CT. A definitive histological diagnosis is required with waiver submission. This may be from a transbronchial lung biopsy or from skin, conjunctiva or salivary gland biopsy. Ophthalmology consultation including slit lamp examination is also required.

No.	MEDICAL CONDITION	EVALUATION DATA
50	Pneumothorax within past 3 months or history of recurrent pneumothorax	Chest x-ray, thin-cut CT scan demonstrating full lung expansion, PFTs, copy of operative report and thoracic surgery consult if surgically treated. Exercise stress ECG with pulse oximetry is required to assess pulmonary function during exertion if FVC or FEV1 are less than 75% predicted value. NOTE: A history of a single episode of spontaneous pneumothorax is considered disqualifying for medical certification until there is x-ray evidence of resolution and until it can be determined that no condition that would be likely to cause recurrence is present (i.e., residual blebs). An applicant who has sustained a repeat pneumothorax normally is not eligible for certification until surgical interventions are carried out to correct the underlying problem. A person who has such a history can be evaluated 3 months after the surgery.
51	Bronchiectasis	Internal Medicine and/or pulmonology consultation to include pulmonary function testing (PFT), imaging studies, if applicable, operative/pathology/microbiology studies, if applicable, current treatment, and documentation of resolution or stability of the condition. Exercise stress ECG with pulse oximetry is required to assess pulmonary function during exertion if FVC or FEV1 are less than 75% predicted value.
HEART		
52	Symptomatic Bradycardia (<50 bpm)	Exercise rhythm strip. If unable to achieve HR >100 BPM or double resting HR then GXT and 24-hour Holter monitor are required. NOTE: GXT should be Bruce Protocol to at least 10 METS. Pharmacologic Stress Tests are not acceptable.
53	Left Bundle Branch Block	Cardiology consultation, PA and lateral CXR, GXT, echocardiogram, and exercise radionuclide scan. NOTE: GXT should be Bruce Protocol to at least 10 METS. Pharmacologic Stress Tests are not acceptable.
54	Acquired Right Bundle Branch Block	Cardiology consultation, PA and lateral CXR, GXT, echocardiogram, and exercise radionuclide scan. NOTE: GXT should be Bruce Protocol to at least 10 METS. Pharmacologic Stress Tests are not acceptable.
55	Implanted Pacemaker	Cardiology consultation, PA and lateral CXR, GXT, echocardiogram, and exercise radionuclide scan. Detailed reports of surgical procedures as well as cerebral and coronary arteriography and other major diagnostic studies are of prime importance; evaluation of pacemaker function to

No.	MEDICAL CONDITION	EVALUATION DATA
		include description and documentation of underlying rate and rhythm with the pacemaker disabled or at its lowest setting, programmed pacemaker parameters, surveillance record, and exclusion of myopotential inhibition and pacemaker induced hypotension, powerpack data including beginning of life (BOL) and elective replacement indicator/end of life (ERI/EOL). <u>NOTE:</u> GXT should be Bruce Protocol to at least 10 METS. Pharmacologic Stress Tests are not acceptable.
56	Premature Atrial Contractions (2 or more on standard ECG)	24-hour Holter monitor. If PAC frequency of occurrence is > 10 of any 50 beats, 10% of any one hour, or 1% of 24 hours of monitoring, or applicant is symptomatic cardiology consultation, echocardiogram, and GXT are required. <u>NOTE:</u> GXT should be Bruce Protocol to at least 10 METS. Pharmacologic Stress Tests are not acceptable.
57	Premature Ventricular Contractions (2 or more on standard ECG)	24-hour Holter monitor. If PAC frequency of occurrence is > 10 of any 50 beats, 10% of any one hour, or 1% of 24 hours of monitoring, or applicant is symptomatic cardiology consultation, echocardiogram, and GXT are required. <u>NOTE:</u> GXT should be Bruce Protocol to at least 10 METS. Pharmacologic Stress Tests are not acceptable.
58	2nd Degree AV Block Mobitz I	Cardiology consultation, PA and lateral CXR, GXT, echocardiogram, and exercise radionuclide scan. <u>NOTE:</u> GXT should be Bruce Protocol to at least 10 METS. Pharmacologic Stress Tests are not acceptable.
59	2nd Degree AV Block Mobitz II	Cardiology consultation, PA and lateral CXR, GXT, echocardiogram, and exercise radionuclide scan. <u>NOTE:</u> GXT should be Bruce Protocol to at least 10 METS. Pharmacologic Stress Tests are not acceptable.
60	3rd Degree AV Block	Cardiology consultation, PA and lateral CXR, GXT, echocardiogram, and exercise radionuclide scan. <u>NOTE:</u> GXT should be Bruce Protocol to at least 10 METS. Pharmacologic Stress Tests are not acceptable.
61	Preexcitation Syndrome	Cardiology consultation, 24-hour Holter monitor, GXT and echocardiogram. <u>NOTE:</u> GXT should be Bruce Protocol to at least 10 METS. Pharmacologic Stress Tests are not acceptable.

No.	MEDICAL CONDITION	EVALUATION DATA
62	History of Radio Frequency Ablation	3-month wait, then cardiology consultation, 24-hour Holter monitor, GXT and echocardiogram. <u>NOTE:</u> GXT should be Bruce Protocol to at least 10 METS. Pharmacologic Stress Tests are not acceptable.
63	History of Supraventricular Tachycardia (3 or more consecutive non-ventricular ectopic beats)	Cardiology consultation, 24-hour Holter monitor, GXT, TFTs, and echocardiogram. If evidence of abnormalities exercise radionuclide scan and cardiac catheterization are required and surgical/ablative procedure reports if performed. <u>NOTE:</u> GXT should be Bruce Protocol to at least 10 METS. Pharmacologic Stress Tests are not acceptable.
64	History of syncope, greater than one episode, within the last 5 years	Cardiology consultation, neurology consultation, 24-hour Holter; bilateral carotid US.
65	History of Atrial Fibrillation within the last 5 years	Document previous workup for CAD and structural heart disease, to include cardiology consultation addressing use of anticoagulants and functional capacity, 24-hour Holter monitor, GXT and echocardiogram. <u>NOTE:</u> GXT should be Bruce Protocol to at least 10 METS. Pharmacologic Stress Tests are not acceptable.
66	Chronic Atrial Fibrillation	Cardiology consultation addressing use of anticoagulants and functional capacity, 24-hour Holter monitor, GXT and echocardiogram. <u>NOTE:</u> GXT should be Bruce Protocol to at least 10 METS. Pharmacologic Stress Tests are not acceptable.
67	Paroxysmal/Lone Atrial Fibrillation	Cardiology consultation addressing use of anticoagulants and functional capacity, 24-hour Holter monitor, GXT and echocardiogram. <u>NOTE:</u> GXT should be Bruce Protocol to at least 10 METS. Pharmacologic Stress Tests are not acceptable.
68	History of Angina Pectoris	Cardiology consultation, hospital admission summaries if applicable, coronary catheterization report, statement of functional capacity, blood chemistries, including total cholesterol, HDL, LDL, and triglycerides, echocardiogram with Doppler flow study, maximal myocardial perfusion exercise stress test no sooner than 6-months post event.
69	History of Myocardial Infarction	Cardiology consultation, hospital admission summaries if applicable, coronary catheterization report, statement of functional capacity, blood chemistries, including total cholesterol, HDL, LDL, and triglycerides, echocardiogram with Doppler flow study, maximal myocardial perfusion exercise stress test no sooner than 1 month post event.

No.	MEDICAL CONDITION	EVALUATION DATA
		NOTE: Acceptable treatment of applicants includes all Food and Drug Administration approved diuretics, alpha-adrenergic blocking agents, beta-adrenergic blocking agents, calcium channel blocking agents, angiotension converting enzyme (ACE inhibitors) agents, and direct vasodilators. Centrally acting agents (e.g. reserpine, guanethidine, guanadrel, guanabenz, and methyldopa) are usually not acceptable. The use of flecainide is unacceptable when there is evidence of left ventricular dysfunction or recent myocardial infarction.
70	History of Atherectomy; CABG; PTCA; Rotoblation; or stent	Cardiology consultation, hospital admission summaries if applicable, coronary catheterization report, statement of functional capacity, blood chemistries, including total cholesterol, HDL, LDL, and triglycerides, echocardiogram with Doppler flow study, maximal myocardial perfusion exercise stress test no sooner than 1 month post event, 6 months for CABG.
71	Hypertension, systolic BP > 160 or diastolic BP > 100, with or without medication	ECG, serum chemistries, lipid profile, UA, documentation of family history of CAD, DM, hypertension, CVA, hyperlipidemia, and renal disease. NOTE: An initial reading exceeding 160/100 should be confirmed by three blood pressure readings separated by at least 24 hours each. Acceptable treatment of applicants includes all Food and Drug Administration approved diuretics, alpha-adrenergic blocking agents, beta-adrenergic blocking agents, calcium channel blocking agents, angiotension converting enzyme (ACE inhibitors) agents, and direct vasodilators. Centrally acting agents (e.g. reserpine, guanethidine, guanadrel, guanabenz, and methyldopa) are usually not acceptable.
72	History of Valvular Disease, non-specified	Cardiology consultation, GXT, 2-D M-mode echocardiogram with Doppler flow study and 24-hour Holter monitor. NOTE: GXT should be Bruce Protocol to at least 10 METS. Pharmacologic Stress Tests are not acceptable.
73	Aortic and Mitral Insufficiency	Cardiology consultation, GXT, 2-D M-mode echocardiogram with Doppler flow study and 24-hour Holter monitor. NOTE: GXT should be Bruce Protocol to at least 10 METS. Pharmacologic Stress Tests are not acceptable.
74	History of Valve Replacement	Cardiology consultation addressing cardiac function, evidence of embolic phenomena, arrhythmias, structural abnormalities, or ischemia. GXT, 2-D M-mode echocardiogram with Doppler flow study and 24-hour Holter monitor, INR values for 6 months prior to application, copy of operative report.

No.	MEDICAL CONDITION	EVALUATION DATA
75	History of Valvuloplasty	Cardiology consultation, GXT, 2-D M-mode echocardiogram with Doppler flow study, 24-hour Holter monitor, and copy of operative report.
76	History of Heart Transplant	Generally not waiverable. Contact NMC for guidance.
77	Cardiac decompensation or cardiomyopathy	Cardiology consultation, GXT, 2-D M-mode echocardiogram with Doppler flow study and 24-hour Holter monitor. <u>NOTE: Waiver not granted if ejection fraction < 40%.</u>
78	Congenital heart disease accompanied by cardiac enlargement, ECG abnormality, or evidence of inadequate oxygenation	Cardiology consultation addressing cardiac function, evidence of embolic phenomena, arrhythmias, structural abnormalities, or ischemia. GXT, 2-D M-mode echocardiogram with Doppler flow study and 24-hour Holter monitor.
79	CHF, Hypertrophy or dilatation of the heart	Cardiology consultation, GXT, 2-D M-mode echocardiogram with Doppler flow study and 24-hour Holter monitor.
80	Pericarditis, endocarditis, or myocarditis	Cardiology consultation addressing cardiac function, GXT, 2-D M-mode echocardiogram with Doppler flow study and 24-hour Holter monitor, and documentation of resolution or stability of the condition.
81	Anti-tachycardia devices or implantable defibrillators	Generally not waiverable. Contact NMC for guidance.
VASCULAR SYSTEM		
82	Aneurysm, Abdominal or Thoracic	Surgery and cardiology consultations, hospital admission summaries if applicable, coronary catheterization report, statement of functional capacity, blood chemistries, including total cholesterol, HDL, LDL, and triglycerides, echocardiogram with Doppler flow study, maximal myocardial perfusion exercise stress test.
83	History of Aneurysm -Status Post Repair within the last 5 years	Surgery and cardiology consultations, hospital admission summaries, operative reports, coronary catheterization report, statement of functional capacity, blood chemistries, including total cholesterol, HDL, LDL, and triglycerides, echocardiogram with Doppler flow study, maximal myocardial perfusion exercise stress test.

No.	MEDICAL CONDITION	EVALUATION DATA
84	Symptomatic Arteriosclerotic Vascular disease	Cardiology consultation, hospital admission summaries if applicable, coronary catheterization report, statement of functional capacity, blood chemistries, including total cholesterol, HDL, LDL, and triglycerides, echocardiogram with Doppler flow study, maximal myocardial perfusion exercise stress test.
85	Buerger's Disease	Internal Medicine consultation to include documentation of normal extremity function and exercise tolerance.
86	Thrombophlebitis	Internal Medicine consultation to include documentation of normal exercise tolerance.
ABDOMEN, VISCERA AND ANUS CONDITIONS		
87	Cirrhosis- Alcoholic	Internal medicine or gastroenterology consultation with current status report, to include history of encephalopathy; LFTs, albumin; bilirubin; and CBC.
88	Cirrhosis- Non-Alcoholic	Internal medicine or gastroenterology consultation with current status report, to include history of encephalopathy; LFTs, albumin; bilirubin; and CBC.
89	History of acute Hepatitis A, B, or E	Internal medicine or gastroenterology consultation with current status report, to include history of encephalopathy; LFTs, albumin; bilirubin; and CBC. NOTE: Not disqualifying if 6 months have elapsed since onset, LFTs have returned to normal, and applicant is asymptomatic. For acute hepatitis B, HB surface antigen must have cleared
90	History of chronic Hepatitis B	Internal medicine or gastroenterology consultation with current status report, to include history of encephalopathy; LFTs, albumin; bilirubin; and CBC, liver biopsy, hepatitis replication studies (HBeAg and HB DNA).
91	History of acute Hepatitis C	Internal medicine or gastroenterology consultation with current status report, hepatitis replication studies (RNA viral load testing).
92	History of chronic Hepatitis C	Internal medicine or gastroenterology consultation with current status report, to include history of encephalopathy; LFTs, albumin; bilirubin; and CBC, liver biopsy, hepatitis replication studies (RNA viral load testing).
93	History of Liver Transplant	Internal medicine or gastroenterology consultation with current status report, to include history of encephalopathy; LFTs, albumin; bilirubin; and CBC, name and dosage of drugs and side effects.
94	History of Colon/Colorectal Cancer within the last 5 years	Oncology consultation documenting staging, histologic diagnosis, TMN tumor stage, any post-operative therapies, operative/ pathology reports, results of restaging, and current CEA and CBC.

No.	MEDICAL CONDITION	EVALUATION DATA
95	History of Other Gastrointestinal Malignancies within the last 5 years	Oncology consultation documenting staging, histologic diagnosis, TMN tumor stage, any post-operative therapies, operative/ pathology reports, results of restaging, and current CEA and CBC.
96	History of Gastrointestinal Bleeding	Internal medicine or gastroenterology consultation with confirmation that applicant is free of symptoms, endoscopic or other evidence that the bleeding source has healed, copies of operative reports if applicable.
SKIN DISEASES		
97	Collagen Vascular Diseases causing significant functional impairment	Dermatology consultation, documenting use of medications, ability to wear protective equipment, and ability to perform duties.
98	Skin Diseases causing significant functional impairment	Dermatology consultation, documenting use of medications, ability to wear protective equipment, and ability to perform duties.
99	History of Malignant Skin Tumors within the last 5 years	Dermatology consultation documenting staging, histologic diagnosis, Breslow depth, tumor stage, any post-operative therapies, ability to wear protective equipment, ability to perform duties, and operative/ pathology reports. Malignant melanoma requires CXR, other imaging studies, if appropriate, and current laboratory tests.
100	Neurofibromatosis with Central Nervous System involvement	Dermatology consultation, documenting use of medications, ability to wear protective equipment, and ability to perform duties. Neurology consult.
GENITAL-URINARY SYSTEM		
101	Renal Dialysis	Nephrology consultation, BUN, Ca, PO4, creatinine, electrolytes, and treatment plan. NOTE: Chronic dialysis is generally not waiverable. Contact NMC for guidance.
102	History of Renal Transplant	Nephrology consultation, BUN, Ca, PO4, creatinine, electrolytes,, operative report, and discharge summary, etiology of primary renal disease, evaluation of graft versus host disease, CBC, BUN, creatinine.
103	Acute Nephritis	Nephrology consultation, BUN, Ca, PO4, creatinine, electrolytes, and treatment plan.
104	Chronic Nephritis	Nephrology consultation, BUN, Ca, PO4, creatinine, electrolytes, and treatment plan.
105	Nephrosis	Nephrology consultation, BUN, Ca, PO4, creatinine, electrolytes, and treatment plan.

No.	MEDICAL CONDITION	EVALUATION DATA
106	Bladder Cancer	Oncology or urology consultation documenting staging, histologic diagnosis, tumor stage, any post-operative therapies, operative/ pathology reports, results of restaging, and current abdomen-pelvis CT scan, cystoscopy, and contrast study of urinary tract.
107	History of Neoplasms of the kidneys, bladder, or genitourinary tract within the last 5 years	Oncology or urology consultation documenting staging, histologic diagnosis, tumor stage, any post-operative therapies, operative/ pathology reports, results of restaging, and current abdomen-pelvis CT scan, cystoscopy, and contrast study of urinary tract.
108	History of Prostatic Carcinoma within the last 5 years	Oncology or urology consultation documenting staging, histologic diagnosis, tumor stage (Gleason grade), any post-operative therapies, operative/ pathology reports, results of restaging, and current abdomen-pelvis CT/MRI reports, bone scan reports, and PSA, including post-op PSAs. Document applicant's physical limitations, bladder competence, and any medications.
109	Polycystic Kidney Disease	Nephrology consultation, BUN, Ca, PO4, creatinine, electrolytes, head MRI or MRA, and treatment plan.
110	Pyelitis or Pyelonephritis	Nephrology consultation, BUN, Ca, PO4, creatinine, electrolytes, and treatment plan.
111	Pylonephrosis	Nephrology consultation, BUN, Ca, PO4, creatinine, electrolytes, and treatment plan.
112	Hydronephrosis with impaired renal function	Nephrology consultation, BUN, Ca, PO4, creatinine, electrolytes, and treatment plan.
113	Renal Calculus - Multiple Episodes or Retained Stones	Urology consultation, BUN, Ca, PO4, creatinine, electrolytes, imaging studies, if appropriate, and treatment plan. NOTE: Ureteral stent is acceptable if functioning without sequela.
114	Ureteral or Vesical Calculus-with or without stent	Urology consultation, BUN, Ca, PO4, creatinine, electrolytes, imaging studies, if appropriate, and treatment plan. NOTE: Ureteral stent is acceptable if functioning without sequela.
115	History of Gender Reassignment	Complete medical history and records to determine that there is no medical, psychiatric, or psychological condition. Medical disqualification is considered appropriate during the time of hormonal manipulation until such time as there is a stabilization of the physiological response on maintenance medication.
MUSCULOSKELETAL		
116	Amputations at or proximal to the metatarsal or metacarpal joints, or any amputation	Orthopedic consultation to include functional status (degree of impairment as measured by strength, range of motion at joints adjacent to amputation, pain), medications with side effects and all pertinent medical reports.

No.	MEDICAL CONDITION	EVALUATION DATA
	causing significant functional impairment	NOTE: When prostheses are used or additional control devices are installed in a vessel to assist the amputee, the credential(s) will be limited to require that the devices (and, if necessary, even the specific vessel) must always be used when acting under the authority of the credential(s).
117	Progressive atrophy of any muscles	Neurology consultation to include functional status (degree of impairment as measured by strength, range of motion, pain), medications with side effects and all pertinent medical studies.
118	Deformities, either congenital or acquired causing significant functional impairment and/or interfering with the ability to wear required personal protective equipment.	Orthopedic consultation to include functional status (degree of impairment as measured by strength, range of motion, pain), medications with side effects and all pertinent medical studies.
119	Limitation of motion of a major joint causing significant functional impairment	Orthopedic consultation to include functional status (degree of impairment as measured by strength, range of motion, pain), medications with side effects and all pertinent medical studies.
120	Neuralgia or Neuropathy, chronic or acute causing significant functional impairment	Neurology consultation to include functional status (degree of impairment as measured by strength, range of motion, pain), medications with side effects and all pertinent medical studies.
121	Sciatica causing significant functional impairment	Neurology or orthopedic consultation to include sufficient documentation to exclude specific causes of back pain, functional status (degree of impairment as measured by strength, range of motion, pain), medications with side effects and all pertinent medical studies.
122	Osteomyelitis, acute or chronic, with or without draining fistula(e) causing significant functional impairment	Orthopedic consultation to include functional status (degree of impairment as measured by strength, range of motion, pain), medications with side effects and all pertinent medical studies.
123	Tremors causing significant functional impairment	Neurology consultation to include functional status (degree of impairment as measured by strength, range of motion, pain), medications with side effects and all pertinent medical studies.
124	Osteoarthritis causing significant functional impairment	Rheumatology consultation to include functional status (degree of impairment as measured by strength, range of motion, pain), medications with side effects and all pertinent medical studies. NOTE: Waiver considered for an applicant who is taking aspirin, ibuprofen, naproxen, similar

No.	MEDICAL CONDITION	EVALUATION DATA
		nonsteroidal anti-inflammatory drugs (NSAID), or COX-2 inhibitors; however, the applicant must present evidence documenting that the underlying condition for which the medicine is being taken is not in itself disabling and the applicant has been on therapy (NSAID) long enough to have established that the medication is well tolerated and has not produced adverse side effects.
125	Rheumatoid Arthritis and Variants causing significant functional impairment	Rheumatology consultation to include functional status (degree of impairment as measured by strength, range of motion, pain), medications with side effects and all pertinent medical studies. NOTE: Waiver considered for an applicant who is taking aspirin, ibuprofen, naproxen, similar nonsteroidal anti-inflammatory drugs (NSAID), or COX-2 inhibitors; however, the applicant must present evidence documenting that the underlying condition for which the medicine is being taken is not in itself disabling and the applicant has been on therapy (NSAID) long enough to have established that the medication is well tolerated and has not produced adverse side effects.
126	Acute Polymyositis	Neurology consultation to include functional status (degree of impairment as measured by strength, range of motion, pain), medications with side effects and all pertinent medical studies.
127	Dermatomyositis	Rheumatology consultation to include functional status (degree of impairment as measured by strength, range of motion, pain), medications with side effects and all pertinent medical studies. NOTE: Waiver considered for an applicant who is taking aspirin, ibuprofen, naproxen, similar nonsteroidal anti-inflammatory drugs (NSAID), or COX-2 inhibitors; however, the applicant must present evidence documenting that the underlying condition for which the medicine is being taken is not in itself disabling and the applicant has been on therapy (NSAID) long enough to have established that the medication is well tolerated and has not produced adverse side effects.
128	Lupus Erythematosus	Internal medicine consultation to include functional status (degree of impairment as measured by strength, range of motion, pain), medications with side effects and all pertinent medical studies.
129	Periarthritis Nodosa	Internal medicine consultation to include functional status (degree of impairment as measured by strength, range of motion, pain), medications with side effects and all pertinent medical studies.
130	Ankylosis, curvature, or other marked deformity of the spinal column causing significant functional impairment	Submit a current status report to include functional status (degree of impairment as measured by strength, range of motion, pain), medications with side effects and all pertinent medical reports.

No.	MEDICAL CONDITION	EVALUATION DATA
131	History of Intervertebral Disc Surgery within the last 5 years	Orthopedic or neurosurgery consultation to include functional status (degree of impairment as measured by strength, range of motion, pain), medications with side effects and all pertinent medical studies. The applicant must be asymptomatic, must have completely recovered from surgery, must be taking no medication, and must have suffered no neurological deficit. The Examiner should confirm these facts in a brief statement.
132	Cerebral Palsy, Muscular Dystrophy, Myasthenia Gravis, or other Myopathies	Neurology consultation to include functional status (degree of impairment as measured by strength, range of motion, pain), medications with side effects and all pertinent medical studies.
133	Other disturbances of musculoskeletal function, congenital or acquired causing significant functional impairment	Neurology or orthopedic consultation to include functional status (degree of impairment as measured by strength, range of motion, pain), medications with side effects and all pertinent medical studies. NOTE: The paraplegic whose paralysis is not the result of a progressive disease process is considered in much the same manner as an amputee.
134	Symptomatic herniation of intervertebral disc	Orthopedic or neurosurgery consultation to include functional status (degree of impairment as measured by strength, range of motion, pain), medications with side effects and all pertinent medical studies. The applicant must be asymptomatic, must have completely recovered from surgery, must be taking no medication, and must have suffered no neurological deficit. The Examiner should confirm these facts in a brief statement.
135	History of recurrent symptomatic back pain causing significant functional impairment within the last 10 years	Orthopedic or neurosurgery consultation to include functional status (degree of impairment as measured by strength, range of motion, pain), medications with side effects and all pertinent medical studies. The applicant must be asymptomatic, must have completely recovered from surgery, must be taking no medication, and must have suffered no neurological deficit. The Examiner should confirm these facts in a brief statement.
136	Scar tissue that involves the loss of function causing significant functional impairment	Orthopedic consultation to include functional status (degree of impairment as measured by strength, range of motion, pain), medications with side effects and all pertinent medical studies.
LYMPHATICS		
137	History of Hodgkin's Disease Lymphoma within the last 10 years	Oncologist / hematologist consultation documenting staging, histology, past and present treatment(s) together with report of recent CT scans of the chest and abdomen.

No.	MEDICAL CONDITION	EVALUATION DATA
138	History of Leukemia, Acute and Chronic - All Types within the last 5 years	Oncologist / hematologist consultation documenting staging, histology, past and present treatment(s).
139	History of Chronic Lymphocytic Leukemia within the last 5 years	Oncologist / hematologist consultation documenting staging, histology, past and present treatment(s).
140	Adenopathy secondary to Systemic Disease or Metastasis within the last 5 years	Oncologist / hematologist consultation documenting staging, histology, past and present treatment(s).
141	Lymphedema causing significant functional impairment	Orthopedic or surgery consultation to include functional status (degree of impairment as measured by strength, range of motion, pain), medications with side effects and all pertinent medical studies.
142	History of Lymphosarcoma within the last 5 years	Oncologist / orthopedic consultation documenting staging, histology, past and present treatment(s).
NEUROLOGIC		
143	History of Cerebral Thrombosis	Current neurology consultation to include brain MRI, bilateral carotid ultra sound, and cerebral angiography.
144	History of Intracerebral or Subarachnoid Hemorrhage	Neurosurgical consultation and confirmation of successful obliteration of the vascular anomaly, neurologic and neuropsychologic evaluations, reports of MRI or CT scan to confirm absence of hydrocephalus.
145	History of Transient Ischemic Attack	Current neurology consultation to include brain MRI, bilateral carotid ultra sound, echocardiogram to include bubble-contrast and cerebral angiography.
146	History of Intracranial Aneurysm	Neurosurgical consultation and confirmation of successful obliteration of the vascular anomaly, neurologic and neuropsychologic evaluations, reports of MRI or CT scan to confirm absence of hydrocephalus.
147	History of Arteriovenous Malformation	Neurosurgical consultation and confirmation of successful obliteration of the vascular anomaly, neurologic and neuropsychologic evaluations, reports of MRI or CT scan to confirm absence of hydrocephalus.

No.	MEDICAL CONDITION	EVALUATION DATA
148	Intracranial Tumor within the last 5 years	Oncologist / hematologist consultation documenting staging, histology, past and present treatment(s) report of CT scans and post-operative reports and radiation treatment(s) if applicable. Pituitary tumors also require endocrinology consultation.
149	History of Pseudotumor Cerebri	Submit all pertinent medical records, current neurologic report, name and dosage of medication(s) and side effects. NOTE: An applicant with a history of benign supratentorial tumors may be considered favorably for a waiver after a minimum satisfactory convalescence of 1 year.
150	Allergic Encephalomyelitis	Current neurology consultation with complete neurological evaluation and appropriate laboratory and imaging studies, as indicated including neuro-psychological testing.
151	Landry-Guillain-Barre Syndrome	Current neurology consultation with complete neurological evaluation and appropriate laboratory and imaging studies as indicated including documentation of extremity functional status (degree of impairment as measured by strength, range of motion, pain).
152	Myasthenia Gravis	Current neurology consultation with complete neurological evaluation and appropriate laboratory and imaging studies as indicated including documentation of extremity functional status (degree of impairment as measured by strength, range of motion, pain).
153	Multiple Sclerosis	Current neurology consultation with complete neurological evaluation and appropriate laboratory and imaging studies, including recent MRI, as indicated including documentation of extremity functional status (degree of impairment as measured by strength, range of motion, pain). Functional testing as indicated in enclosure (2).
154	Dystonia Musculorum Deformans	Obtain medical records and current neurology consultation, complete neurological evaluation with appropriate laboratory and imaging studies, as indicated including neuro-psychological testing. Functional testing as indicated in enclosure (2).
155	Huntington's Disease	Current neurology consultation with complete neurological evaluation and appropriate laboratory and imaging studies, as indicated including neuro-psychological testing. Functional testing as indicated in enclosure (2).
156	Parkinson's Disease	Current neurology consultation with complete neurological evaluation and appropriate laboratory and imaging studies, as indicated including neuro-psychological testing. Functional testing as indicated in enclosure (2).
157	Wilson's Disease	Current neurology consultation with complete neurological evaluation and appropriate laboratory and imaging studies, as indicated including neuro-psychological testing. Functional testing as indicated in enclosure (2).

No.	MEDICAL CONDITION	EVALUATION DATA
158	Gilles de la Tourette Syndrome	Obtain medical records and current neurology consultation, complete neurological evaluation with appropriate laboratory and imaging studies, as indicated including neuro-psychological testing. Functional testing as indicated in enclosure (2).
159	Alzheimer's Disease	Current neurology consultation with complete neurological evaluation and appropriate laboratory and imaging studies, as indicated including neuro-psychological testing.
160	Dementia	Current neurology consultation with complete neurological evaluation and appropriate laboratory and imaging studies, as indicated including neuro-psychological testing.
161	Slow viral diseases i.e., Creutzfeldt - Jakob's Disease	Current neurology consultation with complete neurological evaluation and appropriate laboratory and imaging studies, as indicated including neuro-psychological testing.
162	History of recurrent headaches of any type that have associated symptoms which can cause sudden incapacitation such as visual disturbances, photophobia, difficulty concentrating, nausea/vomiting, ataxia, paresis, or vertigo	Current neurology consultation with complete neurological evaluation and appropriate laboratory and imaging studies to include characteristics, frequency, severity, associated with neurologic phenomena, name and dosage of medication(s) and side effects.
163	Hydrocephalus, secondary to a known injury or disease process; or normal pressure	Current neurology consultation with complete neurological evaluation and appropriate laboratory and imaging studies, as indicated including neuro-psychological testing.
164	History of Brain Abscess	Current neurology consultation with complete neurological evaluation and appropriate laboratory and imaging studies, as indicated including neuro-psychological testing.
165	History of Encephalitis	Current neurology consultation with complete neurological evaluation and appropriate laboratory and imaging studies, as indicated including neuro-psychological testing.
166	History of Bacterial Meningitis within the last 5 years	Current neurology consultation with complete neurological evaluation and appropriate laboratory and imaging studies, as indicated including neuro-psychological testing.
167	Neurosyphilis	Current neurology consultation with complete neurological evaluation and appropriate laboratory and imaging studies, as indicated including neuro-psychological testing.

No.	MEDICAL CONDITION	EVALUATION DATA
168	History of disturbance of consciousness without identifiable cause within the last 5 years	Current neurology consultation with complete neurological evaluation and appropriate laboratory and CT, MRI, and EEG studies, as indicated.
169	Epilepsy	Submit all pertinent medical records, current neurology consultation, to include characteristics, frequency, severity, associated with neurologic phenomena, name and dosage of medication(s) and side effects. NOTE: Waiver considered when an individual has been seizure-free for at least one year.
170	History of Febrile Seizures-multiple episodes	Submit all pertinent medical records, current neurology consultation, to include characteristics, frequency, severity, associated with neurologic phenomena, name and dosage of medication(s) and side effects. NOTE: Not disqualifying if occurred prior to age 5, without recurrence and off medications for 3 years.
171	History of transient loss of nervous system function(s) without identifiable cause, e.g. transient global amnesia	Current neurology consultation with complete neurological evaluation and appropriate laboratory and CT, MRI, and EEG studies, as indicated including neuro-psychological testing.
172	Trigeminal Neuralgia	Current neurology consultation with complete neurological evaluation and appropriate laboratory and imaging studies to include characteristics, frequency, severity, associated with neurologic phenomena, name and dosage of medication(s) and side effects.
173	History of Head Trauma associated with: Epidural or Subdural Hematoma; Focal Neurologic Deficit; Depressed Skull Fracture; or Unconsciousness or disorientation of more than one hour following injury	Current neurology consultation with complete neurological evaluation and appropriate laboratory and imaging studies, as indicated including neuro-psychological testing. Submit all pertinent (cont'd) medical records, current status report, to include pre-hospital and emergency department records, operative reports, neurosurgical evaluation, name and dosage of medication(s) and side effects.
174	Meniere's Disease	Current neurology consultation, to include characteristics, frequency, severity, associated with neurologic phenomena, name and dosage of medication(s) and side effects, otolaryngology and audiology consults.

No.	MEDICAL CONDITION	EVALUATION DATA
175	Acute Peripheral Vestibulopathy	Current neurology and otolaryngology consultations, to include characteristics, frequency, severity, associated with neurologic phenomena, name and dosage of medication(s) and side effects.
176	Nonfunctioning Labyrinths	Current neurology and otolaryngology consultations, to include characteristics, frequency, severity, associated with neurologic phenomena, name and dosage of medication(s) and side effects.
177	Vertigo or Disequilibrium	Current neurology and otolaryngology consultations, to include characteristics, frequency, severity, associated with neurologic phenomena, name and dosage of medication(s) and side effects.
178	Orthostatic Hypotension causing Vertigo or Disequilibrium	Current neurology and otolaryngology consultations, to include characteristics, frequency, severity, associated with neurologic phenomena, name and dosage of medication(s) and side effects.
179	Sleep Apnea, Central Sleep Apnea, Narcolepsy, Periodic Limb Movement or other sleep disorders	Submit all pertinent medical information and current status report. Include sleep study with a polysomnogram, use of medications and titration study results, along with a statement regarding Restless Leg Syndrome. If surgically treated, must have post operative polysomnogram to document cure or need for further treatment.
PSYCHIATRIC		
180	Adjustment Disorders	Psychiatrist or clinical psychologist clinical status report documenting DSM Axis I thorough V and addressing any disturbances of thought, recurrent episodes, and psychotropic medication(s) to include documenting the period of use, name and dosage of any medication(s) and side-effects used for less than 6 months and discontinued for at least 3 months. NOTE: Waivers considered if medications used for less than 6 months and discontinued for at least 3 months.
181	Attention Deficit Disorder	Psychiatrist or clinical psychologist clinical status report documenting DSM Axis I thorough V and addressing any disturbances of thought, recurrent episodes, and psychotropic medication(s) to include documenting the period of use, name and dosage of any medication(s) and side-effects.
182	Bipolar Disorder	Psychiatrist or clinical psychologist clinical status report documenting DSM Axis I thorough V and addressing any disturbances of thought, recurrent episodes, and psychotropic medication(s) to include documenting the period of use, name and dosage of any medication(s) and side-effects.

No.	MEDICAL CONDITION	EVALUATION DATA
183	Dysthymic or Bereavement Disorder	Psychiatrist or clinical psychologist clinical status report documenting DSM Axis I through V and addressing any disturbances of thought, recurrent episodes, and psychotropic medication(s) to include documenting the period of use, name and dosage of any medication(s) and side-effects.
184	Clinical Depression	Psychiatrist or clinical psychologist clinical status report documenting DSM Axis I through V and addressing any disturbances of thought, recurrent episodes, and psychotropic medication(s) to include documenting the period of use, name and dosage of any medication(s) and side-effects.
185	Psychotic Disorder	Generally not waiverable. Contact NMC for guidance.
186	Substance Dependence-Abuse Dangerous Drugs	<p>Dangerous drug dependence and/or abuse is disqualifying unless there is evidence, satisfactory to the NMC, of cure. Cure is demonstrated by satisfactory completion of a rehabilitation program approved by a federal, state or local government agency followed by at least 12 months of sustained total abstinence from all dangerous drugs. Current status report from a substance abuse professional (SAP) with recommendations for follow-up testing, reports from rehabilitation clinic/center, all drug and alcohol tests since completion of the rehabilitation program, and a Medical Review Officer (MRO) low risk to return to work letter (in accordance with 46 CFR 16.201(f)) should be obtained. See CDOA 2535 (SWEENEY) and CDOA 2638 (PASQUARELLA), both available at: https://afis16.jag.af.mil/dscgi/ds.py/View/Collection-259</p> <p>NOTE 1: Disqualifying unless there is clinical evidence, satisfactory to NMC, of cure, including sustained total abstinence from all dangerous drugs for at least 12 months following completion of a rehabilitation program approved by a federal, state or local government agency.</p> <p>NOTE 2: If the applicant is the holder of a credential that he/she has voluntarily deposited with the Coast Guard based on incompetence due to drug abuse in accordance with 46 CFR Part 5, Subpart E, he/she must provide evidence of compliance with the requirements of 46 CFR 5.205(b) instead of demonstrating cure.</p>
186a	Substance Dependence-Abuse Alcohol	Alcohol dependence and/or abuse is disqualifying unless there is evidence, satisfactory to the NMC, of satisfactory completion of a rehabilitation program approved by a federal, state or local government agency followed by at least 6 months of sustained total abstinence from alcohol. Reports from rehabilitation clinic/center and all alcohol and drug tests since completion of the rehabilitation program should be obtained.

No.	MEDICAL CONDITION	EVALUATION DATA
		<p>NOTE 1: Disqualifying unless there is evidence, satisfactory to NMC, of sustained total abstinence from alcohol for at least 6 months following completion of a rehabilitation program approved by a federal, state or local government agency.</p> <p>NOTE 2: If the applicant is the holder of a credential that he/she has voluntarily deposited with the Coast Guard based on incompetence due to alcohol abuse in accordance with 46 CFR Part 5, Subpart E, he/she must provide evidence of compliance with the requirements of 46 CFR 5.205(c) instead of the above.</p>
187	History of Suicide Attempt within the last 5 years	Psychiatrist or clinical psychologist clinical status report documenting DSM Axis I thorough V and addressing any disturbances of thought, recurrent episodes, and psychotropic medication(s) to include documenting the period of use, name and dosage of any medication(s) and side-effects.
188	Organic mental disorders that cause a cognitive defect	Current psychiatric consultation with complete neurological evaluation and appropriate laboratory and imaging studies, as indicated including neuro-psychological testing.
BLOOD AND BLOOD-FORMING TISSUE DISEASE		
189	Anemia with hemoglobin < 10.0 grams per deciliter	Submit a current internal medicine or hematology consultation with clinical history of the condition and medications, including diagnosis and course. Include a CBC with reticulocyte count, electrophoresis in cases of thalassemia and hemoglobinopathies. (In the case of sickle cell trait, the electrophoresis must document hemoglobin A > hemoglobin S) Hemoglobin A2 quantification in cases of beta-thalassemia trait, serum iron, TIBC, and serum ferritin in cases of thalassemia trait.
190	Hemophilia	Submit a current internal medicine or hematology consultation with clinical history of the condition, including diagnosis and course. Include a CBC with reticulocyte count.
191	Other disease of the blood or blood-forming tissues causing significant functional impairment	Submit a current internal medicine or hematology consultation with clinical history of the condition, including diagnosis and course. Include a CBC with reticulocyte count, electrophoresis in cases of thalassemia and hemoglobinopathies. (In the case of sickle cell trait, the electrophoresis must document hemoglobin A > hemoglobin S) Hemoglobin A2 quantification in cases of beta-thalassemia trait, serum iron, TIBC, and serum ferritin in cases of thalassemia trait.
192	Polycythemia	Submit a current internal medicine or hematology consultation with clinical history of the condition, including diagnosis and course.

No.	MEDICAL CONDITION	EVALUATION DATA
ENDOCRINE DISORDERS		
193	Diabetes Mellitus requiring Insulin or history of DKA	Internal Medicine consultation documenting interval history, blood pressure and weight, evaluation of fasting plasma glucose; and, two current HgA1C's (<8.0) separated by at least 90 days, the most recent no more than 90 days old, ophthalmology consultation.
194	Diabetes requiring Oral Medication	Internal Medicine consultation documenting interval history, blood pressure and weight, evaluation of fasting plasma glucose; and, two current HgA1C's (<8.0) separated by at least 90 days, the most recent no more than 90 days old, ophthalmology consultation, graded exercise test.
195	Addison's Disease	Endocrinology consultation with current status to include names and dosage of medication(s) and side effects.
196	Cushing's Disease or Syndrome	Endocrinology consultation with current status to include names and dosage of medication(s) and side effects.
197	Hypoglycemia, whether functional or a result of pancreatic tumor	Internal Medicine consultation documenting interval history and GTT to document response to glucose load (Blood glucose and symptoms).
198	Hyperthyroidism	Endocrinology or internal medicine consultation, ophthalmology consultation, and recent (within the previous 90 days) thyroid panel to include as a minimum TSH and Free T4.
HUMAN IMMUNODEFICIENCY VIRUS (HIV)		
199	Acquired Immunodeficiency Syndrome (AIDS)	Infectious disease consult documenting viral load determination by polymerase chain reaction (PCR), CD4 lymphocyte count, CBC, cognitive function test battery, and LFTs.
200	Human Immunodeficiency Virus (HIV)	Infectious disease consult documenting viral load determination by polymerase chain reaction (PCR), CD4 lymphocyte count, CBC, cognitive function test battery, and LFTs.
ALLERGIES		
201	Angioneurotic Edema	Allergy consult documenting of all allergy history and symptoms along with history of desensitization and immunotherapy treatments. Medical records of previous treatments are also required. NOTE: Mariners issued waivers for this condition must carry injectable epinephrine and diphenhydramine.

No.	MEDICAL CONDITION	EVALUATION DATA
202	History of Anaphylaxis	<p>Allergy consult documenting of all allergy history and symptoms along with history of desensitization and immunotherapy treatments. Medical records of previous treatments are also required.</p> <p>NOTE: Mariners issued waivers for this condition must carry injectable epinephrine and diphenhydramine.</p>

DRAFT

POTENTIALLY DISQUALIFYING MEDICATIONS

Illegal Substances: Use of illegal or illegally obtained substances, including all illegal or illegally obtained dangerous drugs (as defined in 46 CFR 16.105), is incompatible with maritime service and is not waivable under any circumstances.

Intoxicants: Operation of vessels while under the influence of drugs or alcohol is regulated under 33 CFR Part 95. Issuance of a credential does not authorize a mariner to operate a vessel in contravention of 33 CFR Part 95. *See also* 46 USC § 2302.

Prescription and Over-the-Counter Medications: credential applicants must report **all** prescription and over-the-counter medications at the time of application. Use of certain medications is considered disqualifying for issuance of credentials. The underlying cause or need for use of these medications and potential side effects may result in denial of an credential application or require a waiver.

The following is a non-exhaustive list of common prescription and over-the-counter medications that may be subject to further medical review in accordance with enclosure (5).

Anabolic Steroids: Considered generally not waivable.

Anti-Depressants: Waiver is required, including use as a smoking cessation aid and with Premenstrual Dysphoric Disorder (PMDD).

Anti-Migraine Agents: Waiver is required if used during, or within 24 hours prior to, acting under the authority of the credential.

Anti-Motion Sickness Agents: Temporary use of over-the-counter medications is approved when used in accordance with manufacturers' warnings and directions. Prescription medications require waiver if used during, or within 24 hours prior to, acting under the authority of the credential.

Anti-Psychotics: Considered generally not waivable.

Anti-Vertigo Agents: Waiver is required if used during, or within 24 hours prior to, acting under the authority of the credential.

Anti-Convulsives: Waiver is required.

Anti-Histamines: Temporary use of over-the-counter medications is approved when used in accordance with manufacturers' warnings and directions. Prescription medications require waiver if used during, or within 24 hours prior to, acting under the authority of the credential

Beta-Blockers: Waiver is required.

Barbiturates, Mood Ameliorating, Tranquilizing, or Ataraxic Drugs: Waiver is required.

Calcium Channel Blockers: Waiver is required.

Clonidine: Considered generally not waivable.

Cough Preparations with Dextromethorphan, Codeine, or other Codeine-Related Analogs: Temporary use of over-the-counter medications is approved when used in accordance with manufacturers' warnings and directions. Prescription medications require waiver if used during, or within 24 hours prior to, acting under the authority of the credential.

Legally Prescribed Controlled Substances (including legally prescribed narcotics and legally prescribed medications which contain narcotics such as Tylenol w/ codeine): Generally not waivable if used during, or within 48 hours prior to, acting under the authority of the credential.

Diet Aids and Stimulants (e.g. Dexatrim, Metabolife, etc.): Temporary use of over-the-counter medications is approved when used in accordance with manufacturers' warnings and directions. Prescription medications require waiver if used during, or within 24 hours prior to, acting under the authority of the credential.

Hypoglycemic Agents: Waiver is required.

Insulin: Waiver is required.

Medical Marijuana (or other similar substance, such as Peyote or Ecstasy): Use of medical marijuana (or other similar substance, such as Peyote or Ecstasy), even if legalized by a state, is **not** waivable under any circumstances.

Muscle Relaxants (Robaxin, Flexeril, Parafon, Norgesic, etc): Waiver is required if used during, or within 48 hours prior to, acting under the authority of the credential.

Hypnotics (sleeping aids) and Sedatives: Temporary use of over-the-counter medications is approved when used in accordance with manufacturers' warnings and directions and not used during, or within 24 hours prior to, acting under the authority of the credential. Prescription medications require waiver if used during, or within 24 hours prior to, acting under the authority of the credential.

Sumatriptan (Imitrex): Waiver is required if used during, or within 24 hours prior to, acting under the authority of the credential.

Tranquilizers: Waiver is required if used during, or within 48 hours prior to, acting under the authority of the credential.

Warfarin: Waiver is required. Waiver requires six months of monthly INR measurements.

Zyban (Bupropion, Wellbutrin, other psychotropics used as smoking cessation aids): Waiver is required if used during, or within 48 hours prior to, acting under the authority of the credential.

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VISION AND HEARING STANDARDS

1. VISION REQUIREMENTS FOR LICENSED OR CERTIFICATED DECK PERSONNEL

- a. Applicants for any deck officer license or qualified deck rating must demonstrate that they have vision in each eye correctable to 20/40 and uncorrected vision in each eye of at least 20/200. Applicants for STCW endorsements should meet the same standards. *See* 46 CFR 10.205(d)(2). In all cases, the horizontal field of vision should be not less than 100 degrees in each eye. Waiver information is contained in paragraph 4 below.
- b. These applicants must demonstrate that they have a normal color sense when tested by any of the tests listed in 46 CFR 10.205(d)(2) or an alternative test approved by the NMC. Any questions about acceptable color sense testing methodologies should be directed to the NMC.

2. VISION REQUIREMENTS FOR LICENSED OR CERTIFICATED ENGINEERING PERSONNEL, TANKERMAN, OFFSHORE INSTALLATION MANAGER, BARGE SUPERVISOR, BALLAST CONTROL OFFICER AND RADIO OFFICER

- a. Applicants for any engineering officer license, qualified engineering rating, offshore installation manager, barge supervisor, ballast control officer, radio officer, or tankerman endorsement must demonstrate that they have vision in each eye correctable to 20/50 and uncorrected vision in each eye of at least 20/200. Applicants for STCW endorsements as RFPEW, or for any STCW engineering officer endorsement, should meet the same standards. *See* 46 CFR 10.205(d)(3). The horizontal field of vision should be not less than 100 degrees in each eye. Waiver information is contained in paragraph 4 below.
- b. These applicants are only required to demonstrate that they can distinguish between the colors red, blue, green, and yellow. They may do so by passing any of the tests listed in 46 CFR 10.205(d)(2). Any questions about acceptable color-sense testing methodologies should be directed to the NMC.

3. GREAT LAKES PILOTS VISION STANDARDS

Applicants for original registration and Great Lakes registered pilots must demonstrate annually that they have visual acuity and pass color sense when tested according to the standards set by 46 CFR §402.210(c).

4. WAIVERS OF VISION REQUIREMENTS

- a. 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 section 1 or 2 above. An applicant for an original credential must 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. Generally, waivers for

monocular vision are not granted until the applicant has been subject to monocular vision for at least 180 days.

- b. Applicants with uncorrected vision of up to 20/800 may be granted a local waiver by the REC provided that the corrected vision meets the applicable standards set forth in paragraph 1 or 2 above. The waiver endorsement should include a requirement that the applicant carry spare corrective lenses and wear the corrective lenses when acting under the authority of the credential.
- c. Applicants for Able Seaman (A/B) endorsement who cannot demonstrate normal color vision by passing one of the color vision tests listed in 46 CFR 10.209(d), but who are otherwise qualified for A/B in all respects, may be issued an MMD endorsed as boatswain. The term “boatswain” is defined in 46 CFR 10.103. It is a non-watchstanding, non-navigating position.
- d. Applicants for deck officer licenses limited to restricted inland routes who cannot pass the color vision tests may be considered for a waiver by the NMC for issuance of a license limited to daylight hours only.
- e. Waivers are not normally granted for conditions that accelerate the normal decline in vision from aging.

5. HEARING STANDARDS

- a. Applicants for any credential (original, renewal or raise in grade) should have adequate hearing.
- b. If the examining medical practitioner has concerns regarding the applicant’s ability to adequately hear, the examining medical practitioner 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 documented results of the test(s) should be provided to the examining medical practitioner for review and attached to the completed credential application.
- c. The audiometer test should include testing at the following thresholds: 500 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 20 decibels or less in each ear.
- d. The functional speech discrimination test is carried out at a level of 55 decibels. For issuance of an original license, qualification, or certificate the applicant should demonstrate functional speech discrimination of at least 90%. For renewal or raise in grade of any credential, the applicant should demonstrate functional speech discrimination of at least 80%. 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 20 decibels in each ear and functional speech discrimination should be at least 90% at 55 decibels. An applicant who requires the use of a hearing aid to meet the hearing standards should have a notation of that fact on his or her credential(s) 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.

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MEDICAL REVIEW PROCESS

1. The medical review process applies to mariners who do not meet the physical or medical standards for a credential as contained in references (a) through (d) and/or who have a potentially disqualifying condition as amplified in this NVIC.
2. Credentials are issued (or denied) under the authority of the Officer in Charge, Marine Inspection (OCMI). In the case of medical standards, the OCMI may recommend a waiver for a mariner with a borderline condition discussed in 46 CFR 10.205(d)(4) if extenuating circumstances warrant special consideration.
3. The physical examination report shall be thoroughly reviewed for potentially disqualifying conditions by the REC early in the evaluation process. The REC should advise the applicant immediately if there are any discrepancies or if any additional information is needed. This will give the applicant time to schedule necessary appointments, receive test results, or meet other requirements to prevent unnecessary delays.
4. The REC will determine if any medical or physical condition is potentially disqualifying. The OCMI may, without referral to the NMC, issue a local waiver for the vision requirements stated in paragraph 4.b. of enclosure (4) of this NVIC. The OCMI is not authorized to issue local waivers for any other condition.
5. For any other potentially disqualifying medical or physical condition besides the vision requirements stated in paragraph 4.b. of enclosure (4) of this NVIC, the REC will refer the issue to the NMC for further review. The following items must be included in the package forwarded by the REC to the NMC:
 - a. A statement of the medical or physical condition(s) requiring review by the NMC;
 - b. A copy of all information from the physician addressing the mariner's diagnosis, prognosis, evaluations, tests, medications (dosage, side effects), limitations, and restrictions as discussed in the guidelines in enclosure (3);
 - c. A copy of the applicant's completed form CG-719K, CG-719K/E, or the equivalent;
 - d. A copy of the mariner's credential application, including a detailed description of the credential for which the applicant is applying;
 - e. A copy of any previous medical waivers granted to the applicant by the Coast Guard; and
 - f. Any additional information that may be useful in evaluating the physical or medical condition(s) of the applicant.
6. Incomplete packages will result in delay. The NMC medical reviewers will examine all physical and medical condition(s) noted on form CG-719K and/or CG-719K/E, as additional conditions may be related to the specific condition(s) in question. In all cases, the package should include a narrative from the cognizant medical practitioner describing the condition(s), prognosis, any restrictions, medications prescribed, and any side effects from

the medications that the applicant may experience. Conditions that physically restrict a mariner from being able to perform his or duties should include a report of a practical demonstration of the applicant's abilities and limitations as discussed in enclosure (2) of this NVIC.

7. The NMC will review all information provided. If the first-level medical reviewer(s) determines that the condition(s) requires more technical review, it will be forwarded to the NMC physician reviewer(s) for second-level review. The NMC will determine one of the following:

- a. The applicant is physically and medically qualified for the credential without any limitations, waivers and/or other conditions for issuance of the credential.
- b. The applicant is not physically and/or medically qualified for the credential, but a credential may be issued with appropriate limitations, waivers and/or other conditions for issuance of the credential as specified by the NMC.
- c. Additional information is necessary to determine if the applicant is physically and/or medically qualified for the credential. The NMC will request additional information from the applicant. The NMC will hold the package pending receipt of that information for a period of six months at which time it will be returned to the REC unprocessed.
- d. The applicant is not physically and/or medically qualified for the credential. The package will be returned to the REC for denial of the credential by the OCMI.

8. The NMC will inform the OCMI of the results of its review. **If issuance of a credential is denied due a determination that the applicant is not physically and/or medically qualified, the applicant shall be informed in writing of the cause and advised of the right to appeal the decision in accordance with 46 CFR Subpart 1.03.**

9. If a medical waiver is granted, certain conditions may be placed on the mariner in order to maintain the waiver. These conditions may include, at a minimum, that any deterioration of a waived medical condition shall be immediately reported to the Coast Guard. Where the waived medical condition is progressive, the waiver may require the mariner to submit medical exams and/or tests at varying intervals to track the ongoing status of the waived medical condition. **Applicants have the right to appeal any conditions placed on a waiver in accordance with 46 CFR Subpart 1.03.**

- a. The credential(s) should not be issued unless the mariner signs a document acknowledging, and agreeing to, all conditions placed on the waiver.
- b. Deterioration of a waived medical condition and/or failure to comply with any conditions placed on the waiver may render the waiver invalid. Appropriate administrative action, up to an including suspension or revocation of the mariner's credential(s) in accordance with 46 CFR Part 5, may result.