Commanding Officer United States Coast Guard National Maritime Center 100 Forbes Drive Martinsburg, WV 25404 Phone: (304) 433-3400 Fax: (304) 433-3409 E-mail: iasknmc@uscq.mil

October 30, 2009

Instruction Guide to the Merchant Mariner Physical Examination Report (CG-719K & K/E)

Background: The Coast Guard is releasing a new version of the Merchant Mariner Credential Medical Evaluation Report (CG-719 K) and the Merchant Mariner Evaluation of Fitness for Entry Level Ratings (CG-719 K/E) forms to facilitate obtaining objective medical information which will enable the Coast Guard to make a more accurate assessment of mariner fitness for duty with the overall goal of reducing risk to maritime and public safety.

The revised CG 719K and 719K/E forms more clearly align the Merchant Mariner Credentialing process with the guidelines set forth by Navigation and Vessel Inspection Circular 04-08 (NVIC), MEDICAL AND PHYSICAL EVALUATION GUIDELINES FOR MERCHANT MARINER CREDENTIALS.

This NVIC provides guidance for evaluating the physical and medical conditions of applicants for merchant mariner credentials. The new CG 719K and 719K/E forms are designed to be used primarily in conjunction with Enclosure (3) of the NVIC. Enclosure (3) contains a non-exhaustive list of medical conditions subject to further review and supplemental medical data that should be submitted for such medical review. The use of NVIC 04-08 will serve to facilitate obtaining objective medical evidence of an applicant's physical condition as it relates to the ability to safely perform their Merchant Mariner duties. Without this supporting documentation, the medical evaluation process is delayed due to the need to solicit additional medical information. To prevent delays in processing credential applications, mariners and physicians are highly encouraged to use NVIC 04-08 in conjunction with the new physical examination forms. If these forms are properly completed and the additional relevant medical documentation indicated by NVIC 04-08 encl (3) is provided, even those mariner applicants with significant medical conditions should expect to see reduced processing times for their applications.

General instructions are provided through out the form in order to assist both the examiner and the mariner in providing the correct information.

Which form to use? The CG-719 K/E should be used only by mariners seeking an entry level credential. This form is limited to applicants for the following rating endorsements: Ordinary Seaman, Wiper, or Steward's Department (food handler). The CG-719K should be used for all other endorsement applications.

Mariner physical exams completed on or after January 1, 2010 must be on the new CG719K or K/E (Rev (01/09). Physicals completed and signed on previous versions of the form prior to January 1, 2010 will continue to be accepted provided they are dated within one year of the application.

Sincerely, David C. Stalfort Captain, U. S. Coast Guard

Encl: (1) 719K/E Instructions (2) 719K Instructions

719K/E Instructions

Section I and II should be filled in entirely. The examiner should fill in weight and body mass index. The BMI calculation is discussed on the Centers for Disease Control and Prevention website and may be calculated based on height and weight. A useful link to an adult BMI calculator can be found at: http://www.cdc.gov/nccdphp/dnpa/bmi/adult_BMI/about_adult_BMI.htm

Section III Physical Ability Certification must be completed:

- 1. Credential applicants should 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 the guidelines contained within this table, and for all applicants with a Body Mass Index (BMI) of 40.0 or higher, the practitioner should require that the applicant demonstrate the ability to meet the guidelines. This does not mean, for example, that the applicant must actually don an exposure suit, pull an uncharged 1.5 inch diameter 50' fire hose with nozzle to full extension, or lift a charged 1.5 inch diameter fire hose to fire fighting position. Rather, the medical practitioner may utilize alternative measures to satisfy himself or herself that the applicant possesses the ability to meet the guidelines in the third column. A description of the methods utilized by the medical practitioner should be reported on the CG-719K/E as appropriate. All demonstrations of ability should be performed by the applicant without 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).

The examiner must check the box certifying whether the mariner does or does not have the physical strength, agility, and flexibility to perform the listed tasks. The examiner should check the "Competent" box if the applicant is able to complete all Physical Ability tests satisfactorily, or there are no physical impairments that would preclude such completion.

The examiner should check the "Not Competent" box if any one of the listed items was not completed satisfactorily. If the applicant is unable to perform any of the following functions, the examiner should provide information on the degree or the severity of the applicant's inability to meet the standards.

The examiner should check "Needing Further Review" in the event that the Physical Ability cannot be assessed (e.g. equipment or opportunity to complete equivalent tasks not available).

The examiner must provide their name, office address, License Number, telephone numbers, and signature with date.

Section IV: The applicant must sign and date Section IV

719K Instructions

Pages 1- 2: Provide general instructions for both the applicant and the medical practitioner completing this form. The applicant must print their name and date of birth on the bottom of <u>each page</u> of the CG 719K.

Page 3:

Section I – Applicant Information: The applicant must complete **Section I** entirely, including their signature. An Alien Registration Number may be entered in lieu of a Social Security Number. It is recommended that mariners provide good telephone contact information (home, work, cell) as our medical evaluators may be able to resolve simple issues over the phone.

Section II - Release: Completion of **Section II** is voluntary. Mariners may be able to avoid potential delays in the medical evaluation process by authorizing their verifying medical practitioner to release or discuss pertinent information directly with the Coast Guard Mariners wishing to authorize release need to print their name, sign and date this section.

Page 4

Section III - Medications: The applicant must either check "NONE" if not taking any medications or provide the names of the medications, dosage, and the reason the medication has been prescribed for medications used within 30 days prior to the date of the 719K, or medications used for a period of 30 or more days within the last 90 days prior to the date of the 719K. The (VMP) should review the list of medications for accuracy. See the example below.

Page 4 of 9 of CG-719K Rev. 01-09 Section III - Medications (must be completed by applicant and reviewed by verifying medical practitioner) Credential applicants who are required to complete a general medical exam are required to report all prescription medications prescribed, filled or refilled and/or taken within 30 days prior to the date that the applicant signs the CG-719K or approved equivalent form. In addition, all prescription medications, and all non-prescription (over-the-counter) medications including dietary supplements and vitamins, that were used for a period of 30 or more days within the last 90 days prior to the date that the applicant signs the CG-719K or approved equivalent form, must also be reported. The information reported by the applicant must be verified by the verifying medical practitioner or other qualified medical practitioner to the satisfaction of the verifying medical practitioner to include the following two items. Report all medications (prescription and non-prescription), dietary supplements, and vitamins. Include dosages of every substance reported on this form, as well as the condition for which each substance Additional sheets may be added by the applicant and/or qualified medical practitioner if needed to complete this section (include applicant name and date of birth on each additional sheet). If none, check "NONE." NONE Lisinopril 10mg, one pill a day for high blood pressure Atendol 50 mg; one pill a day for heart rate control and blood pressure Glucophage 500mg, 1 pill twice a day for my diabetes Aspirin 325 mg, one tab a day for blood thinning Colace 500 mg, one as needed for regularity Multivitamin, one a day for dietary supplementation

Page 4 - 5

Section IV - Certification of Medical Conditions:

The applicant must check all the medical conditions/diagnoses that apply. See the example below. The VMP should elaborate on the medical conditions checked by providing comments on 1) the identified condition, 2) list any limitations caused by the condition, 3) is the condition controlled, 4) approximate date of diagnosis, 5) prognosis, and 6) any additional information about the condition. Conditions of concern are those with the potential to cause sudden incapacitation, or have the potential to deteriorate significantly over the next 5 years. In general, medical conditions qualify for a waiver when the conditions are sufficiently controlled to mitigate risk to maritime and public safety. In order to determine whether or not a medical condition is controlled, objective documentation is required as outlined in NVIC 04-08 encl (3). For example, it is not sufficient to only indicate "CAD with MI and CABG in 2004, stable" Supporting objective medical documents would include a recent cardiology evaluation, recent report of GXT (Bruce protocol to at least 8.0 METS), a recent echocardiogram report to assess LVEF and perhaps the coronary catheterization and operative reports from 2004. Recent reports should be no more than 12 months old.

Not every condition listed on the 719K will be specifically referenced in the NVIC. Some conditions are more descriptive, rather than diagnostic. In these cases, an evaluation of the underlying cause of the condition should be obtained from a relevant specialist. For example, fainting spells or loss of consciousness (72) may require a cardiology, neurology or endocrine evaluation based upon the etiology of the symptoms. Any other condition not specifically referenced in the NVIC, the examiner should obtain an evaluation from the relevant medical specialist.

Page 5 of 9 of 1. Identif	y the Con		ontrolle	d?		5. Prognosis	
	-				sis	Additional Information	
2. List Any Limitations 4. Approximate Date of Diagnosis 6. Additional Information							
1.		■ Ear surgery,	45.		⊠	Kidney stones	
2.		Hearing loss, hearing aid	46.		Ñ	Protein/sugar/blood in urine	
3.		Impaired speech or stuttering	47.		õ	Back surgery or Injury	
4.		Deformities of face	48.			Ruptured/hernlated disc	
5.		Open tracheostomy	49.			Fractures requiring surgery	
6.		Poor vision	50.			Limitation of any major joint	
7.		History of eye disease or injury	51.			Bone or joint surgery	
8.		History of eye surgery	52.			Dislocated joint	
9.		Abnormal color vision	53.			Recurrent neck or back pain	
10.		Glaucoma	54.			Swollen or painful joint	
11. 12.		Asthma Emphysions or CORD	55. 56.			Arthritis or bursitis	
12.		Emphysema or COPD Collapsed lung/pneumothorax	57.			Trick or locked knee Amputation or prosthesis	
14.	E	Collapsed lung/pneumothorax Irregular heart beat	58.			Carpal tunnel	
15.	<u>~</u>	Heart murmur or valve replacement	59.	H	ä	Difficulty walking or climbing	
16.	ä	Chest pain or angina	60.	_	ä	Sciatica or nerve pain	
17.		Heart attack/ myocardial infarction	61.			Other bone/joint disorder	
18.		Congestive heart failure	62.		×	Motion/sea sickness	
19.		Heart surgery/stent/angloplasty	63.			impaired balance, or balance disorder or difficulty	
20.		Pacemaker or defibriliator	64.		×	Vertigo or dizziness	
21.		Any other heart condition	65.		×	Numbness or paralysis	
22.	×	High blood pressure/hypertension	66.		×	Head injury or skull fracture	
23.		Aneurysm or blockages	67.		×	Selzures or epilepsy	
24.		Pulmonary embolus or blood clots	68.		×	Recurrent headaches	
25. 26.		Gastrointestinal bleeding or ulcers Crohn's disease or ulcerative colitis	69. 70.		M M	Narcolepsy Sleep apnea	
27.	H	Hepatitis or jaundice	71.	H	8	Restless leg	
28.		Gailbladder problems or stones	72.		E	Fainting spells or loss of consciousness	
29.		Intestinal surgery	73.		ĸ	Stroke or TIA	
30.		Any form of cancer	74.		×	Brain tumor	
31.		Anemia	75.		K	Other brain or nerve disease	
32.		Hemophilia or polycythemia	76.		×	ADD, ADHD, or bipolar	
33.		Any other blood disorders	77.		×	Depression	
34.		Thyroid disease	78.		×	History of suicide attempt	
35.	×	Diabetes	79.		×	Schizophrenia	
36.		HIV or AIDS	80.		×	Anxiety	
37. 38.		Lymphoma or leukemia Tuberculosis	81. 82.		EX	Alcohol or substance abuse	
39.	H	▼ Tuberculosis ▼ Neurofibromatosis	83.	H	×	Loss of memory or amnesia Other psychiatric disease or counseling	
40.		Skin tumors or cancer	84.	H	×	Sleepwalking	
41.		Scieroderma	85.	H	Ñ	Bedwetting since age 12	
42.		Lupus	86.		E	Sex change	
43.		Kidney transplant or dialysis	87.		×	Allergic reactions	
44.	. \square	Kidney disease or cancer	88.	X		Any other disease, surgery or hospitalization	
Condition #	Commer	nt					
#14 Chronic A-fib;diagnosed 2004;asymptomatic;controlled ventricular rate; Rx Coumadin; INR therapeutic;great prognosis;see cardiology consult ETT(Bruce)& EKG							
	#22 Diagnosed HTN '04, controlled w/Lisinopril, no impairing side effects, no limitations; good prognosi						
	#35 DMII dx '01, controlled w/ oral meds, excellent prognosis, no limitations, no diabetic complications; opthalmology and PCM evals and lab studies attached						
	(2 HgBAlc and FBS)						
		shot wound RLE '94, no lim	itatio	ns, fu	ılly l	nealed, no sequeale, no meds,	

Page 6

Section V(a) - Visual Acuity:

The VMP must complete the mariner's Visual Acuity. If any block is marked "Abnormal", information should accompany the CG 719K to explain. For applicants using corrective lenses, the VMP must include both uncorrected and corrected distant vision testing. Current deck standards require an applicant to have correctable vision to at least 20/40 in one eye and uncorrected vision of at least 20/200 in the same eye. Current engineering, radio operator, tankerman and MODU standards require an applicant to have correctable vision of at least 20/50 in one eye and uncorrected vision of at least 20/200 in the same eye. See NVIC 04-08 encl (5) for further guidance.

Section V(b) - Color vision:

Current regulations require all applicants to submit the results of color vision testing. The color vision test performed should be selected from the list provided, and the 719K must be checked *normal* or *abnormal*. If any block is checked "Abnormal", information must accompany the CG 719K to explain. Any alternative test must be approved by the USCG prior to sending the examination report. The use of unapproved alternative testing will likely cause delays in the medical evaluation process. The use of color sensing lenses is prohibited. See NVIC 04-08 encl (5) for further guidance.

Section VI: - Hearing:

It is not necessary to submit an audiogram for an applicant with normal hearing. If hearing is abnormal, the applicant must submit the results of audiogram testing to include functional speech discrimination at 55dB. The frequency responses for each ear are averaged to determine the measure of an applicant's hearing ability. Current regulations have changed the hearing standard from 30dB average at 500 Hz, 1000Hz, 2000Hz and 3000Hz to 20dB in each ear. See NVIC 04-08 encl (5) for further guidance.

Pages 7 and 8

Section VII (a) - Physical information

The VMP should complete all items. The BMI calculation is discussed on the Centers for Disease Control and Prevention website and may be calculated based on height and weight. A useful link to an adult BMI calculator can be found at: http://www.cdc.gov/nccdphp/dnpa/bmi/adult_BMI/about_adult_BMI.htm

Section VII (b) - Physical Exam

This section is to be completed by the VMP only. See the example below. The Verifying Medical Practitioner must make numbered comments about any "abnormal" findings and provide comments and descriptions of any physical impairments and associated limitations. Significant negative findings should be noted as well.

Section VII (b)- Physical Exam (must be completed by verifying medical practitioner)								
#	Normal	Abnormal	System/Organ	#	Normal	Abnormal	System/Organ	
1.	✓		Head, Face, Neck, Scalp	10.	✓		Skin	
2.	✓		Eyes / Pupils / EOM	11.	✓		Lymphatic	
3.	✓		Mouth And Throat	12.	✓		Neurologic	
4.	✓		Ears / Drums	13.	~		Vascular System	
5.	✓		Lungs And Chest	14.	\		Genital-Urinary System	
6.		✓	Heart	15.	~		Hernia	
7.	✓		Abdomen	16.	✓	Missing extremities / Digi		
8.	✓		Upper / Lower Extremities	17.		✓	General / Systemic	
9.	✓		Spine / Musculoskeletal					

Please make numbered comments on abnormal systems/organs:

#6	#6 Chronic a Fib;controlled rate; asymptomatic;9 .0 METS on GXT				
#8	RLE with normal strength, FROM; normal gait; no limitations				
#1	7 FBS 145; HgBA1C now 7.2; diabetic exam WNL; no diabetic retinopathy				

Section VIII - Demonstration of Physical Ability (to be completed by the VMP):

- 1. Credential applicants should 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 the guidelines contained within this table, and for all applicants with a Body Mass Index (BMI) of 40.0 or higher, the practitioner should require that the applicant demonstrate the ability to meet the guidelines. This does not mean, for example, that the applicant must actually don an exposure suit, pull an uncharged 1.5 inch diameter 50' fire hose with nozzle to full extension, or lift a charged 1.5 inch diameter fire hose to fire fighting position. Rather, the medical practitioner may utilize alternative measures to satisfy himself or herself that the applicant possesses the ability to meet the guidelines in the third column. A description of the methods utilized by the medical practitioner should be reported on the CG-719K section IX as appropriate. All demonstrations of ability should be performed by the applicant without 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).

Page 9 Section IX - Verifying Medical Practitioner Recommendation:

The VMP must check the box certifying whether the mariner does or does not have the physical strength, agility, and flexibility to perform the listed tasks. See the example below. The examiner should check the "Competent" box if the applicant is able to complete all Physical Ability tests satisfactorily, or there are no physical impairments that would preclude such completion.

The examiner should check the "**Not Competent**" box if any one of the listed items was not completed satisfactorily. If the applicant is unable to perform any of the following functions, the examiner should provide information on the degree or the severity of the applicant's inability to meet the standards.

The examiner should check "Needing Further Review" in the event that the Physical Ability cannot be assessed (e.g. equipment or opportunity to complete equivalent tasks not available).

The results of any practical demonstration should be recorded in the comment space provided, along with any other comments relevant to this physical examination report.

Verifying Medical Practitioner: The VMP completes this section to include their name, address, phone number, and state license number.

Page 9 of 9 of CG-719K Rev. 01-09							
Section IX – Verifying Medical Practitioner Recommendation							
Recommended Competent		Further Review n in comments)					
Comments on Recommendation:	has been under my care for the last 12 yrs and I have managed his hypertension and diabetes well with oral medications. Mr. Mariner's prognosis is very good and his diabetes and hypertension are well controlled. No episode of symptomatic hypoglycemia; The are no physical limitations and I deem him fully fit to perform his duties The Atrial Fibrillation is unremarkable, without symptoms; managed well with Coumadin and a beta blocker. INRs have been therapeutic. See attached Cardiologist Report). LVEF 55% on echo; 9.0 METS on GXT; no ischemia; very active physically; counseled on weight reduction; Mr. Mariner has never been hospitalized for his A-FIB, and his prognosis is excellent.						
Verifying Medical Practitioner:							
This signature attests, subject to criminal prosecution under 18 USC § 1001, that all information reported by the verifying medical practitioner is true and correct to the best of his/her knowledge and that the verifying medical practitioner has not knowingly omitted or falsified any material information relevant to this form. Name (Printed) of Physician/Physician Assistant/Nurse Practitioner							
	Date						