DCA04MM001
MEDICAL RECORDS INFORMATION

The following medical records information was extracted by Dr. Mitchell A. Garber, the Medical Officer for the National Transportation Safety Board.

The following information was extracted from the assistant captain's pharmacy records obtained under subpoena and dating back to 1998:

> In the year of the accident, prescriptions had routinely been filled in the name of the assistant captain for Ambien (zolpidem – last filled 10/11/03), triamterene/hydrochlorothiazide (last filled 9/5/03), lisinopril (last filled 10/13/03), and tramadol (last filled 9/21/03). In addition, a prescription for Flomax (tamsulosin) was filled for the first time that year on 9/4/03.
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> In the year in which the assistant captain's most recent physical examination (dated 8/14/00) was submitted to the Coast Guard (see below), prescriptions had routinely been filled in the name of the assistant captain for Ambien (zolpidem – filled 7/30/00), triamterene/hydrochlorothiazide (filled 7/25/00), Prinivil (lisinopril – filled 6/18/00), Lipitor (atorvastatin – filled 7/28/00), Proscar (finasteride – filled 7/25/00) and Ultram (tramadol – filled 7/17/00).
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> The following table includes all psychoactive[1] medication prescriptions filled for the assistant captain at his local pharmacy beginning in 1998 (providers O, R, and M were his dentists, L, T, and F were his primary care physicians, and B was his cardiologist):

DATE FILLED	MEDICATION	STRENGTH	AMOUNT	PRESCRIBED BY	INITIAL/ REFILL
3/25/98	Endocet (oxycodone/ acetaminophen)	5/325	33	M-dentist	Initial
6/16/98	Percocet (oxycodone/ acetaminophen	Not Noted	24	O-dentist	Initial
9/11/98	Endocet	5/325	100	L-physician	Initial
11/25/98	Percocet	Not noted	15	O-dentist	Initial
12/9/98	Brometane DX Syrup (dextromethorphan/ brompheniramine/ pseudoephedrine)	Not noted	180ml	L-physician	Initial
12/10/98	Promethazine w/DM syrup	Not noted	180 ml	L-physician	Initial

[1] Psychoactive medications are medications that possess the ability to alter mood, anxiety, behavior, cognitive processes, or mental tension.

5/7/99	Alprazolam	0.25mg	90	L-physician	Initial
6/15/99	Percocet	Not noted	24	O-dentist	Initial
10/11/99	Endocet	5/325	120	L-physician	Initial
11/22/99	Alprazolam	0.25mg	90	L-physician	Initial
2/22/00	Sonata (zalpelon)	10mg	30	L-physician	Initial
2/24/00	Ultram (tramadol)	50mg	100	L-physician	Initial
3/24/00	Ultram	50mg	120	L-physician	Initial
4/10/00	Ultram	50mg	100	L-physician	Refill
5/16/00	Ultram	50mg	120	L-physician	Refill
5/19/00	Endocet	5/325	120	L-physician	Initial
5/19/00	Ambien (zolpidem)	10mg	30	L-physician	Initial
6/13/00	Percocet	5/325mg	20	O-dentist	Initial
6/14/00	Hydrocodone/ acetaminophen	10/500	12	O-dentist	Initial
6/23/00	Norco (hydrocodone/ acetaminophen)	10/325	15	O-dentist	Initial
6/23/00	Ambien	10mg	30	L-physician	Refill
6/28/00	Percocet	5/325	20	O-dentist	Initial
7/17/00	Ultram	50mg	120	L-physician	Refill
7/30/00	Ambien	10mg	30	L-physician	Refill
8/23/00	Alprazolam	0.25mg	90	T-physician	Initial
9/5/00	Ultram	50mg	120	L-physician	Refill
9/12/00	Ambien	10mg	30	L-physician	Refill
10/15/00	Ultram	50mg	120	L-physician	Refill
12/6/00	Ultram	50mg	120	L-physician	Refill
12/11/00	Brometane DX Syrup	Not noted	180ml	T-physician	Initial
12/26/00	Endocet	5/325	120	L-physician	Initial
2/12/01	Ambien	10mg	30	L-physician	Initial
3/8/01	Ultram	50mg	40	L-physician	Initial
3/22/01	Ambien	10mg	30	L-physician	Refill
4/2/02	Ultram	50mg	40	L-physician	Initial
4/22/01	Ambien	10mg	30	L-physician	Refill
4/23/01	Ultram	50mg	120	L-physician	Initial
6/12/01	Vicoprofen (hydrocodone/ ibuprofen)	200/7.5	15	M-dentist	Initial
6/12/01	Percocet	5/325mg	20	O-dentist	Initial
6/14/01	Hydrocodone/ acetaminophen	10/325	15	F-physician	Initial
6/22/01	Ambien	10mg	30	L-physician	Refill
7/22/01	Ambien	10mg	30	L-physician	Refill
8/6/01	Ultram	50mg	120	L-physician	Refill
8/27/01	Skelaxin	400mg	100	L-physician	Initial

	(metaxalone)				
8/27/01	Oxycodone/ acetaminophen	5/325	120	L-physician	Initial
9/24/01	Ultram	50mg	120	L-physician	Refill
10/9/01	Ambien	10mg	30	L-physician	Initial
11/5/01	Cyclobenzaprine	10mg	25	F-physician	Initial
11/5/01	Ambien	5mg	20	F-physician	Initial
11/22/01	Ultram	50mg	120	L-physician	Refill
11/22/01	Ambien	5mg	20	F-physician	Refill
12/7/01	Ambien	5mg	20	F-physician	Refill
12/17/01	Ultram	50mg	120	F-physician	Initial
1/4/02	Ambien	10mg	30	T-physician	Initial
1/5/02	Cyclobenzaprine	10mg	25	F-physician	Refill
1/25/02	Ambien	10mg	30	T-physician	Refill
2/21/02	Ambien	10mg	30	T-physician	Refill
3/20/02	Ambien	5mg	30	B-cardiologist	Initial
4/8/02	Ultram	50mg	28	T-physician	Initial
4/20/02	Ambien	5mg	30	B-cardiologist	Refill
5/6/02	Ultram	50mg	28	T-physician	Refill
5/17/02	Percocet	5/325mg	15	O-dentist	Initial
5/21/02	Ambien	5mg	30	B-cardiologist	Refill
5/23/02	Ultram	50mg	120	F-physician	Initial
6/27/02	Ambien	5mg	30	B-cardiologist	Refill
7/2/02	Tramadol	50mg	50	F-physician	Initial
7/29/02	Tramadol	50mg	50	F-physician	Refill
8/13/02	Ambien	5mg	5	T-physician	Initial
8/20/02	Ambien	5mg	30	T-physician	Refill
8/23/02	Tramadol	50mg	50	F-physician	Refill
9/12/02	Tramadol	50mg	50	F-physician	Initial
9/13/02	Ambien	5mg	30	T-physician	Refill
10/4/02	Tramadol	50mg	120	F-physician	Initial
10/6/02	Ambien	5mg	30	B-cardiologist	Initial
11/4/02	Ambien	5mg	30	F-physician	Initial
12/2/02	Tramadol	50mg	120	F-physician	Initial
12/6/02	Percocet	7.5/500mg	24	O-dentist	Initial
12/12/02	Ambien	5mg	30	F-physician	Initial
1/12/03	Ambien	5mg	30	F-physician	Initial
1/27/03	Tramadol	50mg	120	F-physician	Initial
2/7/03	Ambien	5mg	30	F-physician	Refill
3/7/03	Oxycodone/ acetaminophen	7.5/500	20	O-dentist	Initial
3/10/03	Ambien	5mg	30	F-physician	Refill
3/14/03	Vicoprofen	200/7.5	12	R-dentist	Initial
3/14/03	Tramadol	50mg	120	T-physician	Initial
4/2/03	Brometane DX	Not noted	180ml	T-physician	Initial

	Syrup				
4/11/03	Ambien	10mg	30	T-physician	Initial
5/6/03	Tramadol	50mg	120	T-physician	Initial
5/26/03	Ambien	10mg	30	T-physician	Refill
6/21/03	Ambien	10mg	30	T-physician	Refill
6/21/03	Tramadol	50mg	120	T-physician	Refill
6/27/03	Percocet	7.5/500mg	15	O-dentist	Initial
7/24/03	Ambien	10mg	30	T-physician	Refill
8/8/03	Tramadol	50mg	120	T-physician	Refill
9/5/03	Ambien	10mg	30	T-physician	Initial
9/21/03	Tramadol	50mg	120	T-physician	Initial
10/11/03	Ambien	10mg	30	T-physician	Refill

The following information was extracted from the assistant captain's primary care medical records obtained under subpoena and dating back to 1982.

The assistant captain had been diagnosed with multiple medical conditions, including high blood pressure, high cholesterol, insomnia, and chronic back pain for many years prior to the accident. His records indicated diagnoses of and medications for each of these conditions prior to his most recent physical examination (dated 8/14/00) submitted to the Coast Guard and prescriptions for high blood pressure at the time of his 2 previous physical examinations (dated 10/4/89 and 9/14/95) submitted to the Coast Guard (see below). Many of the initial prescriptions noted above from his pharmacy records were not indicated in his medical records, and except for a few instances in which he was provided a "disability certificate" for work, there were no references to limitations on his work as a result of his conditions or treatment. The records reviewed included specific indications of the assistant captain's occupation.

The physician's note on the same date (8/14/00) as the assistant captain's last physical examination submitted to the Coast Guard does not mention the performance of an examination for or the completion of a merchant marine personnel physical examination report. A note dated 6/27/00 on the same page as the physician's note dated 8/14/00 indicates the renewal of a medication for high blood pressure.

There was no indication in the medical records of any diagnosis of or treatment for head injury, seizures, strokes, substance abuse, psychiatric conditions, or loss of consciousness from any cause.

All notations for the prescription of psychoactive medications are included in the table below. The majority of the medications documented above from the pharmacy records as prescribed by the assistant captain's primary care physicians were not noted in the primary care medical records. There were no references to

limitations on working for any of the entries for the dates below except as indicated:

DATE	INFORMATION
3/31/86	Physician's note indicates "Physical for Merchant license …"
10/4/89	Physician's note indicates "…hypertension, prescription Catapres [clonidine] …"
10/30/89	Physician's note indicates " …prescription Vasotec [enalapril]…"
3/4/91	Physician's note indicates "…Low back strain … Percocet [oxycodone]…"
9/30/91	Physician's note indicates "…prescription Prinivil [lisinopril]…"
12/30/91	Physician's note indicates "…low back pain … 2 weeks … Sciatica … Naprosyn [naproxen]…"
7/27/92	Physician's note indicates "…needs prescriptions – Prinivil – Percocet – Naprosyn. …"
12/3/92	Physician's note indicates "…prescriptions … - Percocet – Naprosyn …"
5/24/93	Physician's note indicates " … Back pain … prescription – Percocet …"
12/13/93	Physician's note indicates "… low back pain … off and on for years …"
5/19/94	Physician's note indicates " … pulled out lower back … few weeks … prescription - CT lumbosacral spine, Relafen [nabumetone]…"
8/14/95	Physician's note indicates "… sciatica …." Also notes "…prescription – Prinivil … Maxzide [triamterene/hydrochlorothiazide] …"
10/10/95	Physician's note indicates "Start Lopressor [metoprolol] …"
3/20/96	Physician's note indicates "… low/mid back pain …"
4/3/96	Physician's note indicates "… Prescription – Accupril [quinapril] … Maxzide …"
12/9/96	Physician's note indicates "… lower back pain … comes and goes …"
8/22/97	Physician's note indicates " … lower back pain … to left leg …" Also notes "… prescription - discontinue Accupril – Zestril [lisinopril]…"
10/16/97	Physician's note indicates "…cervical and thoracic muscle spasm … Daypro [oxaprozin] … Flexeril [cyclobenzaprine] …"
1/27/98	Physician's note indicates "… pulled upper back … sudden onset of sharp upper back pain … muscle spasm – Plan: Norflex [orphenadrine], Relafen …"
3/20/98	Physician's note indicates " … severe lower back pain … 3 days … Prescription … Naprosyn … Flexeril …"
5/20/98	Report of chest CT indicates "…Impression: - no abnormality seen. So significant findings in the chest." Report of abdominal/pelvic CT indicates "…Impression: - no significant finding within the abdomen nor pelvis." Report of lumbosacral spine CT indicates "…Impression: - minimal degenerative lumbar disc change. – No frank disc herniation or spinal canal stenosis. – Degenerative change, right SI joint."
7/13/98	Physician's note indicates "2 day history of low back pain which radiates to thighs … lumbosacral sprain … Norflex … May need MRI for neuro referral …"
9/11/98	Physician's note indicates " … lower back pain … Plan … Percocet …"

2/26/99	Cardiologist's letter indicates "… family history of premature development of coronary artery disease. His father had sudden cardiac death at the age of 43. He also has a history of hypertension and is a past smoker … with significant hypercholesterolemia … no history of exertional chest pain …multiple risk factors for premature development of coronary artery disease. … nuclear stress test has been ordered, He will have an echocardiogram to evaluate for structural heart disease …I will follow him very closely with you…"
3/8/99	Report of Myoview exercise stress test ordered by cardiologist indicates "…Impression: 1. Non-ischemic response. 2. No provocable angina or arrhythmia. 3. Good exercise tolerance with physiological blood pressure response. …" Report of associated myocardial perfusion scan indicates "… No reversible defects to suggest ischemia. "
3/11/99	Report of echocardiography ordered by cardiologist notes "…Interpretations: Normal left ventricular systolic function, trace mitral regurgitation."
5/7/99	Patient Information form indicates "Ferry Captain" under "occupation"
8/23/99	Physician's note indicates " … back pain … shortness of breath … impression … COPD … for full pulmonary function tests …"
10/11/99	Physician's note indicates " … lower back pain with difficulty walking … lumbar strain … Celebrex [celecoxib] … Percocet …"
11/22/99	Physician's note indicates "… complains of lower back pain … Meds – Zestril … Maxide … Lipitor … Impression – osteoarthritis, hypertension … Plan – Vioxx [rofecoxib]…."
11/26/99	Patient Information form indicates "Captain" under "occupation"
2/11/00	Report of lumbosacral spine MRI indicates "…Impression - Broad based central L4-5 disc herniation with approximate 20% narrowing of the anterior thecal sac. - Minimal L5-S1 disc bulge with superimposed right posterior protrusion which abuts the medial right S1 nerve root. No significant spinal canal/foraminal stenosis."
2/22/00	Physician's note indicates "… go over the MRI results … Impression - herniated lumbar disc, hypertension, hyperlipidemia; Plan - …Zestril … Maxzide … Lipitor … Start Ultram [tramadol] 50 mg four times a day as needed, Sonata [zalpelon] 10mg at bedtime." Disability certificate indicates "… totally incapacitated from 2/18/00 to 2/25/00 … herniated lumbar disc."
3/8/00	Neurologist's letter indicates "… four month history of low back pain … no focal neurological deficits. Review of an MRI of the lumbar spine dated 2/23/00 reveals degenerative disc disease … and a herniated disc … The area where the disc is herniated does not correlate with the area of the patient's pain … I have recommended … an EMG of both lower extremities …"
4/4/00	Report of nerve conduction and EMG study indicates "…Impression: This is a normal nerve conduction and EMG study. There are no signs of

	significant multilevel lumbosacral radiculopathy, peripheral nerve entrapment, polyneuropathy or myopathic dysfunction."
5/19/00	Physician's note indicates "… still has pain in shoulder and lower back … Plan … CT scan abdomen and pelvis … Ambien [zolpidem] …"
6/27/00	Note indicates "Pharmacy called … renew Maxzide …"
6/30/00	Report of abdominal/pelvic CT indicates "…Findings: A small focus of calcification noted in the lower pole of the left kidney … The prostate is mildly enlarged. Some scattered sigmoid diverticula …"
7/15/00	Report of kidney ultrasound indicates "…Impression: The left lower renal calcification is linear and most likely scarring, probably related to prior trauma."
8/14/00	Physician's note on same page as 6/27/00 note indicates "…to discuss results of previous testing … Impression – Diverticulitis, Prescription – To [gastroenterologist]." There is no mention in this entry of the performance of an examination for or the completion of a merchant marine personnel physical examination report.
8/21/00	Report of colonoscopy indicates "… Impression: … Multiple diverticula at the ascending colon, the hepatic flexure and the sigmoid colon … Chart note indicates "Prescription: Xanax [alprazolam] 0.25mg one by mouth three times a day as needed #90."
12/26/00	Physician's note indicates "…lower back and hips pain (refer chiropractor) … Percocet, Relafen …"
2/13/01	Note indicates "Pharmacy called … refill on Ambien 10 mg – 5 refills … OK to refill? …"
3/8/01	Note indicates "Prescription: Ultram 50 mg # 40 one by mouth four times a day, Relafen 750 mg #20 one by mouth twice a day …"
4/2/01	Note indicates "Prescription: Ultram 50 mg one by mouth four times a day #120 no refills"
4/23/01	Note indicates "Prescription: Ultram 50 mg one by mouth four times a day #120 3 refills"
7/23/01	Report of exercise SPECT thallium myocardial perfusion scan ordered by cardiologist indicates "Conclusion: 1. Borderline ischemic response for exercise induced ischemia with respect to EKG changes at high work load. 2. Normal myocardial perfusion imaging. 3. Functional Class I (12 Mets) Recommendations: If symptoms persist consider stress echo versus coronary arteriography."
8/24/01	Physician's note indicates "…Hips and back painful … Skelaxin [metaxalone], Vioxx, Percocet"
8/25/01	Patient Information form indicates "Ferry Captain" under "occupation"
11/5/01	Physician's note indicates "… Increasing back pain for 4 days … tired … Myositis … Flexeril … 5-10 days, Naprosyn … 2 weeks … Insomnia … renew Ambien 5 mg 20 tablets and 2 refills." Disability certificate indicates "… patient was seen and treated in my office today. He may

	return to work on 11/12/01. Diagnosis: myositis."
1/4/02	Note indicates "Prescription Ambien 10 mg one by mouth at bedtime #30 with 3 refills …"
5/23/02	A pharmacy call-in slip indicates "…please check with his pharmacy on when has last refill and how many pills - Tramadol 50 mg one every 4 to 6 hours as needed #120 …"
8/13/02	A pharmacy call-in slip indicates "…Ambien 5 mg at bedtime #30 …"
8/23/02	A pharmacy call-in slip indicates "…Tramadol 50 mg one every 4 to 6 hours as needed …"
9/12/02	A pharmacy call-in slip indicates "…Tramadol 50 mg one every 4 to 6 hours as needed #50 …"
10/4/02	A pharmacy call-in slip indicates "…Ultram 50 mg one every 4 to 6 hours as needed #120 …"
11/4/02	A pharmacy call-in slip indicates "…Ambien 5 mg #30 …"
12/12/02	A pharmacy call-in slip indicates "…Ambien 5 mg orally at bedtime #30 2 refills …"
1/3/03	Physician's note indicates "… right side flank pain and mid back pain … abdomen – soft, tender right upper quadrant, no rebound, Impression: cholelithiasis … CT abdomen with contrast …" Disability certificate indicates "… patient was seen in my office today. Patient is able to go back to work on Monday 1-6-03."
1/10/03	Report of abdominal/pelvic CT scan indicates "…Impression: – focal cortical calcification in the lower pole of the left kidney associated with a focal area of cortical thinning. This is likely related to scar. The appearance is unchanged from the prior study of 6/30/00. – 6mm low density lesion on the interpolar region of the left kidney that is too small to further characterize. It is not identified on the prior stucy, howeve, of 6/30/00. Renal ultrasound is suggested. – Colonic diverticulosis"
3/13/03	A pharmacy call-in slip indicates "…Ultram 50 mg one every 4 to 6 hours as needed #120 …"
5/6/03	A pharmacy call-in slip indicates "…Tramadol 50 mg one every 4 to 6 hours as needed #20 2 refills …"
6/3/03	Physician's note indicates "…epigastric pain for 18 hours, sweating … abdomen: tender right upper quadrant abdomen, epigastric … bloating … EKG – normal sinus rhythm – no changes compared to previous … Abdominal pain … ultrasound abdomen … Gas-X …." Disability certificate indicates "… patient seen in our office today. Out of work until 6/9/03 due to his condition."
6/5/03	Report of abdominal ultrasound notes "… Impression: – Tiny gallbladder polyp suspected. No gallstones. No dilated ducts. Borderline liver size with very mild diffuse fatty infiltration. No focal hepatic lesion.

	– Small midpole cyst, left kidney. The remainder of the examination is unremarkable."
8/14/03	A pharmacy call-in slip indicates "…Ambien 10 mg one at bedtime #30 refills 2…"
8/16/03	Physician's note indicates "… Pharyngitis, Prescription: Avelox [moxifloxacin] …"

The following information was extracted from the Coast Guard records of the assistant captain's reports of physical examination for merchant mariner's license, beginning in 1986.

Each of the examinations was indicated as having been performed by the assistant captain's primary care physician referred to as T on the first page of this report. The assistant captain was found competent on each of these examinations, with no notations regarding medication use or medical diagnoses.

3/31/86 – Physical Examination Form for Merchant Mariner's Documents/Merchant Marine Licenses notes that the assistant captain is applying for a "first class pilot" license, that his vision and hearing were normal, that his heart and lungs were "normal" and that he had no "major defects, abnormalities, communicable diseases." The physician indicated (under "Physician's Statement of Findings") that he considered the assistant captain "competent" to perform the duties for which he was applying. Blood pressure was not indicated.

Instructions accompanying the form indicate, "this certificate shall attest to the applicant's acuity of vision, color sense and general physical condition. Epilepsy, insanity, senility, acute venereal disease or neurosyphilis, badly impaired hearing or other defects that would render the applicant incompetent to perform the ordinary duties of the license/merchant mariner's document applied for are causes for certification of incompetence." The instructions indicate the acceptable methods for color vision testing and state, "If the applicant is found competent, the form may be returned to him for forwarding to the Coast Guard. If the applicant is found <u>not competent</u>, the form should be forwarded directly to us from your office. – United States Coast Guard Marine Inspection Office Regional Exam Center, Battery Park Building, New York, NY. … (Please call if you have a question)"

10/4/89 – Merchant Marine Personnel Physical Examination Report form (CG-719K (Rev 5-87) indicates that the examination is for "General physical condition, visual acuity and color sense and hearing. (Required for Orig. license, Orig. AB, Tankerman, Or OMED)." Under "Examination Results – Licensed Physician or Physician Assistant" is noted that the assistant captain had a normal color sense, visual acuity, and hearing, and that his heart and lungs were "clear to auscultation and percussion." No medications were noted under the heading of "Remarks and Medication." The physician noted that in his opinion, the applicant

was "competent" to perform duties aboard a merchant vessel of the United States. Blood pressure was not indicated.

Instructions on the reverse of the form indicate, under "Physical Standards," "In general, epilepsy, insanity, acute venereal disease, neurosyphilis or badly impaired hearing, or other defect that would render the applicant incompetent to perform the ordinary duties of an officer or an unlicensed seaman at sea are causes for certification as incompetent." The instructions indicate requirements for visual acuity and testing requirements for color vision and hearing. There are no instructions to the physician as to the appropriate disposition of the form.

9/14/95 – Merchant Marine Personnel Physical Examination Report form (CG-719K (Rev. 3-95) indicates that the assistant captain's visual acuity, color vision and hearing were normal. It notes his blood pressure to be 138/86, and specifically indicates "no" under the "Doctor's assessment – Does the applicant have or has he/she ever suffered from any of the following" next to the notation "High blood pressure," "Impaired range of motion," and "Other illness or disability." Under "Medications taken," the box next to the indication "no prescription medications" is checked. Under "Comments on Findings," the box next to "No Significant Medical History" is checked. The physician noted that "Considering the findings in this examination, and noting the duties to be performed by the applicant aboard a merchant vessel of the United States of America," he considered the applicant "competent." The applicant's signature appears below the statement "I certify that all information provided by me is complete and true to the best of my knowledge." "Instructions for the Physician" on the first page of the form indicate:

> The United States Code requires a physical examination to determine that all holders of Coast Guard issued Licenses and Merchant Mariner's Documents are of sound health with no physical limitations that would hinder or prevent performance of duties. In general, all mariners must be capable of working in cramped spaces on rolling vessels. They must be able to climb steep stairs or vertical ladders. In an emergency such as a vessel fire or flooding, the mariner must be able to fully participate in the firefighting and lifesaving of passengers and crewmembers. In addition, mariners must be physically able to stand an alert, 4 to 6 hour watch. To do this, they must be free from any sudden onset of a medical condition which would affect their watchkeeping abilities.
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> Detailed guidelines on potentially disqualifying medical conditions may be obtained from any U.S. Coast Guard Regional Examination Center (NVIC 6-89) or by calling Coast Guard Headquarters (G-MVP_2) at 202-267-6828. Examples of impairment that could lead to disqualification include: impaired vision, color vision or hearing; poorly controlled diabetes; multiple or recent myocardial infarctions; psychiatric disorders; and convulsive disorders. In short, any condition that poses an inordinate risk of sudden incapacitation or debilitating complication, and any

condition requiring medication that impairs judgment or reaction time are potentially disqualifying and will require a detailed evaluation.

The Coast Guard will use this physical evaluation to determine the applicant's eligibility to hold a license or document.

There are no instructions to the physician as to the disposition of the form.

8/14/00 – Merchant Marine Personnel Physical Examination Report form (CG-719K (Rev. 3-95) indicates that the assistant captain's visual acuity, color vision and hearing were normal. It notes his blood pressure to be 110/80, and specifically indicates "no" under the "Doctor's assessment – Does the applicant have or has he/she ever suffered from any of the following" next to the notation "High blood pressure," "Impaired range of motion," and "Other illness or disability." Under "Medications taken" is the written comment "none," and the box next to the indication "no prescription medications" is checked. Under "Comments on Findings," the box next to "No Significant Medical History" is checked. The physician noted that "Considering the findings in this examination, and noting the duties to be performed by the applicant aboard a merchant vessel of the United States of America," he considered the applicant "competent." The applicant's signature appears below the statement "I certify that all information provided by me is complete and true to the best of my knowledge." "Instructions for the Physician" on the first page of the form indicate:

The United States Code requires a physical examination to determine that all holders of Coast Guard issued Licenses and Merchant Mariner's Documents are of sound health with no physical limitations that would hinder or prevent performance of duties. In general, all mariners must be capable of working in cramped spaces on rolling vessels. They must be able to climb steep stairs or vertical ladders. In an emergency such as a vessel fire or flooding, the mariner must be able to fully participate in the firefighting and lifesaving of passengers and crewmembers. In addition, mariners must be physically able to stand an alert 4 to 8 hour watch. To do this, they must be free from any sudden onset of a medical condition which would affect their watchkeeping abilities.

Detailed guidelines on potentially disqualifying medical conditions may be obtained from any U.S. Coast Guard Regional Examination Center (NVIC 2-98) or by calling Coast Guard National Maritime Center (NMC-4C) at 703-235-8483. Examples of impairment that could lead to disqualification include: impaired vision, color vision or hearing; poorly controlled diabetes; multiple or recent myocardial infarctions; psychiatric disorders; and convulsive disorders. In short, any condition that poses an inordinate risk of sudden incapacitation or debilitating complication, and any condition requiring medication that impairs judgment or reaction time are potentially disqualifying and will require a detailed evaluation.

The Coast Guard will use this physical evaluation to determine the applicant's eligibility to hold a license or document.

There are no instructions to the physician as to the disposition of the form.

The following information was extracted from the assistant captain's post-accident hospitalization records obtained under subpoena.

The assistant captain underwent surgery, cardiology, psychiatry, and neurology evaluation while hospitalized following the accident. He was treated for self-inflicted injuries from an apparent suicide attempt, had episodic confusion during the hospitalization, and underwent multiple tests including echocardiography, trans-esophageal echocardiography, head CT, carotid color duplex doppler examination, 24-hour Holter monitoring, electroencephalogram (EEG), tilt table testing, and cardiac catheterization. He was found to have an interatrial septal aneurysm and patent foramen ovale, a positive tilt table test, and two vessel coronary artery disease, for which he underwent stent placement. He also had a discharge diagnosis of depression. The results of the above tests were otherwise negative as detailed below.

During the hospitalization, the assistant captain noted no recollection of the events surrounding the allision, indicating that he "suddenly passed out" without lightheadedness or palpitations. He indicated that he was exhausted at the time, but "no more exhausted than usual."

DATE (time)	**INFORMATION**
10/15/03 (1705)	Emergency department notes indicate "…self-inflicted gunshot wound to mid-sternal area … multiple deep lacerations to left wrist … received alert/responsive, combative …" "… 5:30 pm – oxygen saturation fluctuating 84% - 90%. Echocardiogram with positive cardiac tamponade. Cardiac monitor with tachyarrhythmia …transported to OR…."
10/16/03	Echocardiography report notes: "… COMMENTS: THE AORTIC ROOT APPEARS NORMAL THE LEFT ATRIUM APPEARS NORMAL THE LEFT VENTRICLE APPEARS GROSSLY OF NORMAL SIZE THE RIGHT VENTRICLE APPEARS NORMAL THE MITRAL VALVE APPEARS NORMAL THE AORTIC VALVE APPEARS NORMAL INTERPRETATIONS: VERY TECHNICALLY LIMITED STUDY. NO SIGNIFICANT ACCUMULATION OF PERICARDIAL EFFUSION. LOW-NORMAL (?) GLOBAL LV SYSTOLIC FUNCTION. TRACE MITRAL AND TRICUSPID REGURGITATION."

	Report in progress notes of trans-esophageal echocardogram indicates: "Adequate left ventricular systolic function with mild anteroapical hypokinesis. No pericardial effusion. Right ventricle – normal function. No intracardiac shunts. Interatrial septal aneurysm but no doppler evidence of patent foramen ovale. Mitral valve, pulmonic valve, tricuspid valve and aortic valve appears within normal limits. Thoracic aorta free of significant disease. Full report to follow." Formal report of trans-esophageal echocardiogram indicates: "INTERPRETATIONS: THIS WAS A TEE ADEQUATE LV SYSTOLIC FUNCTION WITH MILD HYPOKINESIS OF THE SEPTAL WALL. NO EVIDENCE OF LA, LA APPENDAGE, OR LV THROMBI. TRACE TRICUSPID REGURGITATION. TRACE MITRAL REGURGITATION. NO EVIDENCE FOR PERICARDIAL EFFUSION. INTERATRIAL SEPTAL ANEURYSM WITH SMALL PATENT FORAMEN OVALE BY DOPPLER EXAMINATION. NO MASSES NOR ANY SIGNIFICANT INTRACARDIAC LESION SEEN. THORACIC AORTA FREE OF SIGNIFICANT DISEASE."
10/18/03	Nursing progress note indicates "Agitated – climbing out of bed to get dressed to attend a wedding …" Progress note indicates maximum temperature 101.4.
10/19/03	Report of head CT indicates "CLINICAL HISTORY: AGITATION MENTAL STATUS CHANGE. Non-contrast CT of the head was performed using 7mm contiguous sections. The ventricles and extra-axial spaces are normal in appearance. There is no mass effect or abnormal brain density. There is no extra-axial collection. The calvarium is intact. IMPRESSION: NEGATIVE NON-CONTRAST CT OF THE HEAD."
10/20/03 (0330)	Nursing progress note indicates "…agitated, calling out, confused, attempting to get out of bed …"
10/21/03	Report of carotid color duplex doppler examination notes "… Please note that this study is suboptimal, it is a portable study performed in the SICU. FINDINGS: RIGHT: There is minimal plaque of the internal carotid artery. There is no stenosis identified. The peak systolic velocity of the internal carotid is 79 cm/s, which is within normal limits. The vertebral artery flow is antegrade. LEFT: There is minimal plaque of the internal carotid artery. There is no stenosis identified. The peak systolic velocity of the internal carotid is 75 cm/s, which is within normal limits. The vertebral artery flow is antegrade. …"

	Psychiatry note indicates "…appears less confused than yesterday … being ruled out for pneumonia …"
10/22/03	Cardiology note indicates "… although syncope unlikely taking into consideration its clinical presentation, will proceed with syncope workup for completeness purpose …" Summary of 24-hour Holter report indicated, under "Impressions and Findings" – "THE BASIC RHYTHM WAS SINUS WITH AN AVERAGE HEART RATE OF 90/min THERE WERE A TOTAL OF 155 VEBS NOTED THERE WERE NO VENTRICULAR COUPLETS OR TACHYCARDIA THERE WERE A TOTAL OF 21 SVEBS OBSERVED THERE WERE NO SUPRAVENTRICULAR TACHYARRHYTHMIAS"
10/23/03	Cardiology note indicates "…???Syncope – mechanism of episode remains uncertain. Patient denied lightheadedness, palpitation. He states he was exhausted at the time. When the boat hit the pier he was sitting in a chair. No loss of stool/urine continence. Patient states that he was no more exhausted than usual. …"
10/23/03	Neurology consultation indicates "…patient states that he has no recollection of what happened on the boat, according to his words he suddenly passed out, when he regained consciousness there was chaos … denies any prior history of loss of consciousness. … IMPRESSION: SYNCOPAL EPISODE BY HISTORY ACCORDING TO PATIENT. RULE OUT VASOVAGAL EPISODE, RULE OUT CARDIOGENIC ETIOLOGY. DOUBT THAT THE PATIENT HAD A SEIZURE. …"
10/24/03	Electroencephalogram (EEG) Report noted: "… CONDITIONS DURING RECORDING: <u>ASLEEP, BRIEFLY DROWSY</u> ALPHA: 7.5-8 CPS UP TO 75 UV SEEN 70% IN OCCIPITAL DERIVATIONS. BETA: SMALL 15-30 CPS UP TO 10 UV SEEN. NO ABNORMAL PATTERN SEEN. MOVEMENT ARTIFACT SEEN. …HYPERVENTILATION: NOT DONE PHOTIC STIMULATION: NOT DONE IMPRESSION: NORMAL EEG, AWAKE, DROWSY.
10/27/03	Tilt table test summary report indicates: "Findings: 1. In the supine position: HR=75 bpm; BP=132/88 mmHg 2. Immediately upon assuming the upright position: HR=81 bpm; BP=117/83 mmHg. There were no associated symptoms. 3. The patient underwent passive upright tilt to 80 degrees for 39 minutes. During that time, the HR varied from 81 to 96 bpm and the BP gradually fell from 130/89 to 72/42 mmHg. At 22 minutes, the patient developed mild lightheadedness which progressed to fatigue and ultimately to syncope. The test was terminated after 39

	minutes. The patient was returned to the supine position with resolution of the symptoms and hemodynamic changes. 4. Right carotid sinus massage was performed; with this maneuver, the HR fell to 65 bpm and the BP fell to 110/70 mmHg. There were no associated symptoms IMPRESSION: ORTHOSTATIC HYPOTENSION SUGGESTING SOME DEGREE OF DYSAUTONOMIA POSSIBLE DUE TO MEDICATION ABNORMAL RESPONSE TO UPRIGHT PASSIVE TILT DIAGNOSTIC OF VASODEPRESSOR SYNCOPE NORMAL RESPONSE TO CAROTID SINUS MASSAGE." Pre-procedure (cardiac catheterization) assessment noted medication taken that day to include Lopressor (metoprolol), Klonopin (clonazepam), Accupril (quinapril), and Haldol (haloperidol). Report of cardiac catheterization notes: "Lesions - LAD (Mid), Discrete, 70% lesion DIAG1 (Proximal), Discrete, 40% lesion RCA (Proximal), Diffuse, 100% lesion Diagnosis – Right Dominant LM patent/LCX patent LV FUNCTION: LVC not done Grafts/Collaterals – Collateral flow from CX to RT PDA Collateral flow from MARG2 to RCA Collateral flow from MARG2 to RCA Collateral flow from SEP1 to RCA"
10/28/03	Cardiology note indicates "…Possible syncope – tilt table exam consistent with vasodepression … Patient remembers no previous syncope or near syncope. …"
11/13/03	Draft discharge summary from psychiatry service notes "…patient denies any prior psychiatric treatment or history. He denies any history of alcohol or drug use. … Family history is positive for … depression … Final Diagnosis … Depression, not otherwise specified … status post cardiac catheterization with stent placement …"