

**NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, DC 20594**

HUMAN PERFORMANCE GROUP FACTUAL REPORT

**LOCATION & DATES
DCA04MM001**

A. ACCIDENT

Accident No.	DCA-04-MM-001
Vessel	MV Barberi
Location:	Staten Island, NY
Date:	October 15, 2004
Time:	1520 EDT

B. OPERATIONS/HUMAN PERFORMANCE GROUP

Barry Strauch, NTSB, Human Performance Group Chairman
Lt. Mark Bottiglieri, United States Coast Guard
Detective Jeffrey Ward, New York Police Department

C. SUMMARY

On Wednesday, October 15, 2003, about 1520, the Staten Island Ferry, Andrew Barberi, was involved in an allision with the south side the B1 Maintenance pier at the St. George ferry terminal on State Island. The vessel had departed the Whitehall terminal in Manhattan about 1500 on a regularly scheduled trip to Staten Island, with an estimated 1,500 passengers aboard. The trip was uneventful until the vessel passed abeam of the KV buoy. At that point the vessel was to turn to starboard and reduce speed in preparation for docking at St. George. Instead, it continued to maintain its course and speed until it impacted the pier. The vessel sustained extensive damage, ten passengers were killed and 70 passengers were seriously injured in the accident.

D. REPORT

The human performance group focused on the assistant captain, the captain, the of the of the guidance and oversight of his employer, the Staten Island Ferry, and of the Coast Guard and the New York City Department of Transportation, the regulators of the ferry operation.

The Assistant Captain

BACKGROUND

The Assistant Captain was born on October 2, 1948, in Brooklyn, New York. From 1968 until 1970 he was on active duty in the Army with a specialty in radar operations. There he received a Good Conduct medal, a National Defense Service Medal, and achieved expert status on the M-14. He was honorably discharged on June 22, 1970. In 1976 he briefly worked for Murphy Pacific Marine Salvage as a deckhand. He then joined he worked for Poling Transportation Corporation, of Staten Island, NY, a tugboat and barge operator, where he worked until late 1985 as a deckhand and tankerman. He received training there in vessel navigation in the New York Harbor. With Poling he operated "...on the waters of the Atlantic Ocean from Maine to Virginia up to 200 miles offshore, including the entrance to New York Harbor." He began his employment with the Staten Island ferry on September 16, 1985, as a deckhand. He was promoted to Assistant Captain on May 11, 1987. His records indicate that in March 24, 1986, he completed Radar Course at Marine Simulation, Incorporated, and on February 9, 1996, he completed "Radar Observer Recertification-Any Waters" from the Center for Maritime Education, Seamen's Church Institute of New York and New Jersey.

At the time of the accident he held the permanent position of assistant captain. He was promoted to the provisional position of assistant captain on May 11, 1987, to the provisional position of captain on July 21, 1996, and to the permanent position of assistant captain on February 2, 2002. On May 1, 2003, he voluntarily stepped down from the provisional position of captain to the permanent position of assistant captain. According to the Director of Personnel of the Ferry, he did this to gain a higher seniority, since at the time the scope of the Ferry operation was being reduced, and he faced the possibility of being laid off with the relatively lower seniority level he held in the position of Captain. According to his wife, as a result of the change he was able to maintain a more regular work schedule, and was able to accrue more overtime than before the change. As a result, his earnings increased as a result.

PERFORMANCE

Personnel records at the New York City Department of Transportation indicate that the Assistant Captain received a total of 13 performance appraisals between the first that had been completed in 1987 and the most recent, completed in 2001. His performance in the first two appraisals, 1987 and 1988, was rated as "superior" in each, where superior is second to outstanding on a five-point scale of performance that ranged from "unsatisfactory" to "outstanding." His performance in all subsequent performance appraisals was uniformly rated as "outstanding." The performance appraisals included the following comments, in addition to the rating category that had been selected:

- Man continues to improve his abilities as First Class Harbor Pilot. He needs very little supervision in his assigned duties. Has passed stringent

test issued by the U.S. Coast Guard to obtain the various licenses he has (1987).

- Real conscientious, polite. Holds First Class pilot's License. In uniform all the time. Very good seaman (1988).
- ...an extremely dedicated coworker and demonstrates excellent boating skills and attention to duty (1989).
- [His] excellent boating skills coupled with a first rate attitude makes him an all around outstanding employee. I feel fortunate to be working with him and I know that he gives a 100% effort at all times. He is a dedicated city worker and an asset to this department (1990).
- [He] ... is extremely trustworthy while operating vessel under all conditions Always in uniform, always on time or before starting time. Assists in all drills with good working knowledge of deck department. Extremely good asset to Director of Ferries (1991).
- [He] ... handles his job extremely well, and during times of restricted visibility carries out his duties and handles the vessel in a very professional manner. He is an asset to this department and a credit to the profession (1992).
- [He] ... performs his job task in a professional manner with little supervision required (1993).
- Because of his professionalism morale is high among the crew. The condition of the boat reflects this, and the on-time performance of the vessel is exemplary (1993).
- Performs all assigned tasks in a safe and timely manner. An asset to the department (1995).
- Outstanding (1998).
- [He] ... has improved his performance over the past year and plans to up his performance levels even further in the coming year (1999).
- [He] ... is very punctual, is very dependable, and always has a neat appearance. He is an asset to the Department (2000).
- [He] ... does an outstanding job (2001).

There were no letters of reprimand or other form of negative assessments in the assistant captain's personnel records. Two letters of commendation, dated March 9, 1990, and April 28, 1995, were in the records. The first concerned his performance as the Assistant Captain on the Barberi when it experienced a propulsion control failure while docking in Manhattan, thus minimizing potential injury to passengers and crew and damage to the vessel. The letter commended him and noted that "Your highly professional actions under these extreme conditions are most commendable and in keeping with the highest tradition of our seafaring nation and a tribute to the City of New York, the Department of Transportation and the Bureau of Transit Operations. The second noted his "outstanding leadership and dedication to duty" as the Captain of the Barberi when it experienced a mechanical failure while docking in Staten Island. The letter, signed by the then Director of Ferry Operations, noted that he "...rose to the occasion, maintained ...[his] composure, and took control of the situation."

ATTENDANCE

Since January 2002, the assistant captain had been on sick leave the following days:

- 1/25/02
- 3/15/02
- 5/17/02
- 5/28/02
- 6/14/02
- 6/28/02
- 7/2-7/3-02
- 8/9/02
- 9/13/02
- 12/5-12/6/02
- 1/3/03
- 1/10/03
- 3/7/03
- 4/1-4/4/03
- 5/23/03
- 6/3-6/6/03
- 9/26/03

The Assistant Captain worked the same shift for at least two months before the accident, beginning on a Tuesday and ending on a Friday. His shift began at 1330 and was scheduled to end at 2130, but he worked an additional 30 minutes to two hours almost every night in overtime. The following table indicates the time he reported in and the time he ended each shift, as well as the hours of overtime, in hours and minutes, that he accrued each day in the 30-days before the accident.

<u>Date</u>	<u>Start</u>	<u>End</u>	<u>Overtime</u>
9/16	1319	2300	1:30
9/17	1318	2300	1:30
9/18	1315	2200	0:30
9/19	1317	2200	0:30
9/20-9/22	Off		
9/23	1320	2300	1:30
9/24	1318	2300	1:30
9/25	1315	0000	2:30
9/26-	Sick leave		
9/27-9/29	Off		
9/30	1319	2300	1:30
10/1	1312	2300	1:30
10/2	1321	2200	0:30

10/3	1319	2130	0:00
10/4-10/6	Off		
10/7	1318	2230	1:00
10/8	1323	2230	1:00
10/9	1303	2330	2:00
10/10	1303	2200	0:30
10/11-10/13	Off		
10/14	1316	2300	1:30
10/15	1315		

MEDICAL INFORMATION

The Assistant Captain's most recent physical examination form, Coast Guard form CG-719K, on file with the Coast Guard was completed on August 14, 2000. The examining physician signed the form and indicated that the Assistant Captain did not have or did not suffer from conditions that included "high blood pressure," and that the Assistant Captain was not taking prescription medications.

Coast Guard records indicate that, in compliance with Coast Guard medical requirements, before that physical examinations had been performed on March 31, 1986; October 4, 1989, and September 14, 1995. With the exception of the 1986 physical that did not request the information, these records indicated that the Assistant Captain was not taking prescribed medication. The same physician, who found the Assistant Captain to be qualified, performed all the examinations.

TOXICOLOGICAL FINDINGS

Samples of blood and urine were drawn from the captain upon his admission to the hospital, about 1703. The Safety Board obtained a portion of the samples for toxicological analysis. The analysis found the presence of 0.76 µg/g Tramadol in the blood and diphenhydramine in the urine.

MEDICAL INFORMATION

The Coast Guard has the results of four physical examinations, all performed and signed by an internist located in Staten Island. The dates of the examinations were:

- 8/14/2000
- 9/14/1995
- 10/4/1989, and
- 3/31/1986.

The forms indicated that the Assistant Captain was not taking medications at the time, and was considered qualified on all examinations. See Medical Records Information for further information on the medical condition of the Assistant Captain.

72-HOUR HISTORY

The assistant captain was off two, three, and four days before the accident (October 11-13). On October 13, two days before the accident, he awoke at 0730 to drive his wife to work. According to his wife, the day before the accident, October 14, he was asleep when she left the house at 0815. Staten Island Ferry records indicate that he reported to work at 1315 and left work at 2300. He went directly home after 2300 that night. He and his wife had dinner after he got home, then they played with their 8-month old grandson, who was staying with them for 1-½ weeks. They then watched television, fed the baby, and went to sleep between 0115 and 0130.

The next morning, the day of the accident, he was asleep when she left the house at 0815. She returned home at 1220 and found him working around the house. He seemed fine when she left the house at 1300, the last time she saw him before the accident.

THE CAPTAIN

BACKGROUND

The Captain was born on April 12, 1965, in Staten Island, New York. He graduated high school in Staten Island in 1984. He was employed as a deli clerk from 1982 through 1984, apparently as a part-time employee while he attended high school. Upon graduation from high school in 1984, he joined the Navy and was assigned to the submarine fleet. He was honorably discharged from the Navy in 1988 at the rank of quartermaster 2-submarines, or E 5. He received several decorations and commendations for performance, including a Meritorious Unit Commendation and letter of commendation from the Commander in Chief, Atlantic Fleet.

After leaving the Navy he was a stock handler for two months in a toy company's warehouse and then for three months he was a driver for a parcel delivery service. He was deli clerk for exactly two years after that in a local delicatessen until he became a deckhand with the Staten Island Ferry on October 1, 1990.

He worked as a deckhand for about five years, until January 1995 when he was promoted to mate, and then on February 2, 1995, he was promoted to the provisional position of Assistant Captain. The effective date of this promotion was listed in New York City Department of Transportation (NYC DOT) documents as February 2, 1995, but he may not have performed the duties of that position until June 1995. According to the resume that he submitted to the NYC DOT in his application for promotion to the position of Captain, he was promoted to Assistant Captain in June 1995. He was promoted to the permanent position of Assistant Captain on February 2, 2002. The *Barberi* was not his regularly assigned vessel. He was filling in for the regular captain who was on sick leave.

PERFORMANCE

Personnel records at the New York City Department of Transportation indicate that the Assistant Captain received a total of nine performance appraisals between the first that had been completed in 1991 and the most recent, completed in 1998. His performance in the first appraisal, 1991, was rated as “very good”, where very good is second to outstanding on a five-point scale of performance that ranged from “unsatisfactory” to “outstanding.” His performance in all subsequent performance appraisals was uniformly rated as “outstanding.” The performance appraisals included the following comments, in addition to the rating category that had been selected:

- Excellent worker, always on time, knows what to do, always obliging, very helpful (1991).
- ...[His] attendance and punctuality are highly favorable. Completes all assigned tasks in a prompt, and timely manner. A self-starter, highly motivated, requires little supervision. Very dependable...[His] knowledge and seamanship skills make him an invaluable asset to his crew (1992).
- Exhibits a positive attitude. High moral. Will perform any and all assignments necessary. I utilize ...[him] in every possible way, including giving instruction to the crew during drilling (1993).
- [He] presents a sharp appearance. Holds a 3rd mate’s license and has successfully done all the pilotage needed for an assistant captain’s position. Always punctual. Needs no supervision. It is my hope that ... [he] will soon be chosen as one of our next mates and soon after assistant captain (1994).
- ...[he] is one of those rare employees who constantly takes his job seriously. A real asset on any crew (1995)
- ...[he] pilots the boat in a very professional manner observing all the rules and safety requirements. He’s always on time and in uniform. In certain situations he goes beyond the call of duty (1996).
- Get OJT for possible use as captain (1998).
- ...[he] is always punctual, completes his assignments promptly, always makes a good appearance and seldom takes unscheduled time off (1999)
- Due to heavy vessel traffic on weekends ...[he] handles situations well. Helps educate crew with knowledge of vessel. Always on time, he is excellent to work with (2000)

There were no letters of reprimand in his personnel records. On August 2, 1991, he was given a letter of commendations for the “prompt action and professional manner” in which he helped in the rescue of a passenger that had jumped overboard in New York’s upper bay.

ATTENDANCE

The following table indicates the time he reported in and the time he ended each shift, as well as the hours of overtime, in hours and minutes, that he accrued each day in the 30-days before the accident.

<u>Date</u>	<u>Start</u>	<u>End</u>	<u>Overtime</u>
9/16	1257	2100	0:00
9/17	1235	2130	0:30
9/18	1230	2130	0:30
9/19	1223	2100	0:00
9/20-9/22	Off		
9/23	1231	2100	0:00
9/24	1243	2100	0:00
9/25	1229	2100	0:00
9/26-	1230	2200	1:00
9/27-9/29	Off		
9/30	1305	2300	1:30
10/1	1251	2300	1:30
10/2	1308	2200	0:30
10/3	APPEARS TO BE SICK LEAVE		
10/4-10/6	Off		
10/7	1246	2230	1:00
10/8	1246	2230	1:00
10/9	1304	2330	2:00
10/10	1257	2200	0:30
10/11-10/13	Off		
10/14	1307	2300	1:30
10/15	1245		

MEDICAL INFORMATION

The Captain completed his most recent physical examination, to meet the requirements for Coast Guard medical approval to perform the duties of Staten Island ferry operator, on December 10, 2001. The examination forms indicated that he was qualified, and was not taking prescribed medications at the time. Coast Guard records indicate that he had been examined previously on December 9, 1996. A different physician completed that form.

TOXICOLOGICAL INFORMATION

After the accident, along with other crewmembers of the Barberi, the Captain provided samples to the Coast Guard for detection of alcohol and five prohibited drugs, i.e., opiates, phencyclidine (PCP), marijuana (tetra hydra cannibanol-THC), cocaine metabolites, and amphetamines. Neither alcohol nor illegal drugs were detected.

72-HOUR HISTORY

The Captain invoked his Fifth Amendment rights and declined to answer Safety Board questions. The Safety Board was unable to obtain information from him to construct his 72-hour history.

Medical Evaluation

COAST GUARD REQUIREMENTS

Applicants for Coast Guard merchant mariners documents, serving on seagoing vessels of 200 FRT or more, must undergo a physical examination once every five years, or when their licenses are upgraded, to determine that they are of sound health, and with no physical limitations that would hinder or prevent performance of duties. Applicants must then submit proof of their being found fit to the Coast Guard, as stated in 46 Code of Federal Regulations (CFR) 12.02-17 (e). Mariners with pilot endorsements, which include captains and assistant captains on the Staten Island ferry, are required to be examined annually. The Coast Guard does not require mariners to submit proof of the medical examinations outside of the 5-year or license upgrade intervals, but they are required to possess such proof and offer it to Coast Guard personnel upon demand. Coast Guard Activities New York, the Coast Guard facility that oversees operations on the New York waterway, did not record instances of its personnel requesting such proof from either the captain or the assistant captain on the *Andrew J. Barberi* and thus, were unable to indicate whether either one complied with this requirement.

Any licensed physician, physician assistant, or nurse practitioner can perform the Coast Guard-required examination. After completing the examination the physician is to sign the examination form, Coast Guard form 719K, and indicate whether or not the applicant was found to be medically qualified. Other forms may be used, provided that the examination was carried out in accordance with the standards listed in form 719K. There are no instructions to the health care practitioner as to the disposition of the form. At the conclusion of the examination the examiner is to give the results of the examination or the CG form 719K to the applicant, who then may submit them to the nearest Coast Guard Regional Examination Center (REC). REC evaluators review them according to policy, regulations, and guidance published in the Marine Safety Manual, a USCG publication, and in the Navigation and Vessel Inspection Circular (NVIC) No. 2-98, "Physical Evaluation Guidelines for Merchant Mariner's Documents and Licenses."

The Coast Guard revised form CG-719K in January 2002. The revised form added examples of physical requirements of mariner's duties, relevant information, and specific examination instructions to the health care provider. This includes: a partial list of physical demands that mariners may face, general physical requirements, e.g., free of medical condition that pose risk of sudden incapacitation, hearing and vision requirements, and potentially disqualifying

conditions within the circulatory, digestive, endocrine, musculoskeletal, nervous, and respiratory systems, as well as infectious diseases and psychiatric disorders. For example, under the heading “circulatory system,” the examining health care provider is asked to respond yes or no to the question, “does the applicant have or ever suffered from any of the following?”

- Heart disease (stress test within the past year)
- Hypertension (recent BP reading)
- Chronic renal failure
- Cardiac surgery (stress test within the past year)
- Blood disorder/vascular disease”

In general, all mariners must be capable of working in cramped spaces on rolling vessels and must be able to climb steep stairs or vertical ladders. In emergencies such as vessel fires or flooding, mariners 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 that would affect their watchkeeping abilities.

Mariners, physicians, or other interested persons desiring to obtain detailed guidelines on potentially disqualifying medical conditions may contact any U.S. Coast Guard Regional Examination Center (REC) or Coast Guard Headquarters, or both examining information that the Coast Guard has provided on its web site. Disqualifying conditions 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.

Coast Guard REC evaluators make one of three decisions regarding the results of physical examinations, that the applicant is: 1) physically qualified in which case a medical approval would be granted, 2) not qualified in which approval would be denied, or 3) not qualified but by a “very minor” disqualifying factor. In this instance the applicant may be granted a waiver if it could be demonstrated that he or she could perform the job safely, such as the requirement to wear or possess eyeglasses to correct for visual deficiencies. In these situations REC examiners send the application forward to the Coast Guard’s National Maritime Center (NMC) near Washington, DC, with the recommendation that a waiver be granted. Examiners at the NMC will then further review the application and, in the event that they are uncertain, will forward the application for review to one of two medical officers that the Coast Guard retains for this purpose. The physicians are both Public Health Service physicians on active assignment with the Coast Guard, with collateral duties. Of the approximately 50,000 to 60,000 applications that NMC personnel estimate that the Coast Guard annually receives, about

1,200 to 1,400 are sent to the NMC for further review. The Coast Guard keeps no central record of the number of applications that are denied.

The Coast Guard does not require mariners that develop disqualifying physical conditions before their next physical examinations are due to inform them of the disqualifying conditions. However, if the Coast Guard becomes aware of a licensed mariner with a disqualifying physical condition, it would investigate the situation and possibly begin suspension and revocation proceedings against the mariner. The Coast Guard has no formal mechanism that allows physicians, or other interested persons, to notify them of a mariner with a disqualifying physical condition.

The Coast Guard does not require applicants found physically unqualified to submit form Coast Guard-719K to them or otherwise inform them of such findings. Coast Guard practices regarding submission of the form 719K allow applicants to seek examinations from multiple health practitioners until they are found physically qualified, and then submitting the form from that examination to the Coast Guard. The Coast Guard also does not track the results of USCG form Coast Guard-719K by examining physicians, and thus is not able to determine whether individual physicians are finding a higher proportion of mariners physically qualified than what would be predicted by national norms, nor does it track the number of applications completed by a single physician.

The Coast Guard does not retain a list of medications that are prohibited. Coast Guard retained physicians consider medication use in terms of the condition calling for the medication, and the extent to which the medication controls the particular condition. USCG examiners refer to the Physician's Desk Reference (PDR) for guidance when considering medication use. NMC personnel indicated that medication use may or may not cause an application to be denied, and that RECs may not be consistent in their approval or denial decisions of identical medication use. To eliminate this possibility, the Coast Guard has long term plans to centralize the physical evaluation process, with a hoped for time frame of Spring/Summer of 2007 to implement the change.

The Coast Guard retains two physicians, both permanently employed by the Public Health Service but assigned to the Coast Guard's NMC, to provide the final determination regarding the approving of a mariner's physical condition. The physician in charge of these determinations, the Coast Guard Personnel Command Senior Medical Officer, had been with the Public Health Service since 1973, attached to the Coast Guard since 1993. He graduated Duke University School of Medicine and completed his residency at Baylor University in pediatrics in 1973. He had not received training in occupational medicine, nor has he consulted with a specialist in occupational medicine while associated with the Coast Guard.

In the event that he had questions regarding a waiver for a mariner, the physician relied on the advice of the mariner's health care provider. If the health care provider considered the condition not debilitating, and one in which the mariner was able to perform his or her job, then he would grant the waiver, sometimes with conditions. He would follow the guidance of the examining or treating physician.

The Coast Guard Personnel Command Senior Medical Officer considered the use of certain medications to be disqualifying. For example, medications for sleep such as "Ambien" or "Sonata" were disqualifying because of the possibility that a mariner may not be able to function if performing nighttime duty. Similarly, use of any kind of narcotic would disqualify a because of the likelihood of drowsiness. In general however, as long as the treating physician believed that the medication was controlling the condition without side effects, the Coast Guard would usually grant a waiver. He would send the request of an applicant who had been using the pain reliever Tramadol back to the treating physician to determine whether the applicant was drowsy as a result of the medication. Unless such information was provided, or unless he had information from his employer or others that they observed the person drowsy, he would grant the waiver because in his opinion it would be very difficult to assess a potential risk of sudden incapacitation due to medication like Tramadol.

On January 29, 2004, the Commanding Officer of the NMC wrote to the Safety Board informing it that the Coast Guard Personnel Command Senior Medical Officer "misspoke at the meeting, and asked to clarify his statement." The physician said:

When I was asked at the NTSB Inquiry about a waiver possibility for Tramadol, I was under the mistaken opinion that Tramadol was not a narcotic. Since the meeting, I have checked the PDR (Physician's Desk Reference) and realized that it is a narcotic. If possible, you may want to inform the Board attendees that I was mistaken and had responded too quickly to their question. You might also add that I do refer to the PDR when a mariner is on a medication with which I am unfamiliar. I also failed to mention at the NTSB that whenever I question that the mariner may be unable to do his job and respond to emergency-type situations, I ask for an on-site evaluation by putting him through various tests (going up/down ladders rapidly, carrying fire fighting equipment, pulling weighted dummies out of the water, etc.).

ATTACHMENT I
Interview Summaries

KEN KAUFMANN-Chief of Licensing and Seaman Certification, for CG Activities, NY-he is the “merchant marine licensing specialist” and has been a civilian with USCG for 19 years. Before that he served 21 years active duty. He has been doing licensing since August 1980.

USCG has guidelines that they go through, using manual, although there are some things in the manual that are not in the guidelines, e.g., psychotropic drugs. If everything on the form is no they don't really go over them. They look at the yes

There is a standard USCG form that they give: CG7-19K, (a new one has been issued). In the new one if applicant answers “yes” there is new information required, e.g., stress test, hemoglobin test for diabetes. But the requirements themselves have not changed.

Applicant submits the application, then he or she must have the physical and drug free form submitted by physician. Then there is another form submitted for sea duty, e.g., military time. The doctor fills out the yes/no form, or the MD has the applicant do it.

Mariner applicants can go to their own doctors. It used to be that applicants could go to the public health service for free, but after everything changed and USCG lost public health in the 70s-80s, applicants go to their own physician. Then the physicians check that the applicant is able to complete the duties. If there is a stress test required, or if more info required from doctors, they tell the person that they may have to send it to NMC for a waiver, they will use the public health doctors for medical questions.

If applicants have more that 20/200 they will do a vision waiver, if greater than that they will send them to an ophthalmologist. If it still comes back 20/200 they will put in corrective lenses must be worn. Engineers need vision corrected to 20/50 or greater, deck persons must have vision corrected to 20/20. As with other standards, the vision requirements stricter for deck personnel.

It looks like Capt. Smith's physical met all the standards. He has all “no” answers” on the physical application form, his vision is better than 20/20, passed the color vision on Ishihara, blood pressure is fairly normal, he was not taking any medications, so this would not have been sent to NMC.

If the applicant is a pilot, a master with pilotage endorsements, he or she is required to undergo a physical annually. This is a complete physical. The requirement is listed in 46 CFR 10.709

Applicants must submit a physical every 5 years for renewal, and when there is a change in grade. USCG license must be renewed every 5 years with the medical as well. If there is a medical waiver, any change must be reported within 30 days,

e.g., waiver for eyesight. If they require an annual physical submitted to them, and the vision has gotten worse, they could review it and pull it.

Mr. Smith was not given any waiver. His requirement is for an annual physical, and to carry it with him so that if a USCG guy boards the vessel, he must carry it with him. No indication with him that anything was wrong, according to his year 2000 physical.

When a mariner gets a raise in grade, he or she doesn't need a new physical if he had one within the last 3 years. They would have to go to the physician's guide and USCG guide to find out if it's a disqualifying medication.

Chapter 4, Volume 3 in the USCG Marine Safety Manual, provides guidance on the requirements for the physical. This is how to implement the regulations. If there are any question as to what is disqualifying they will send it to NMC or National Maritime Center. In that event the NMC will send it back with either approval or disapproval. Applicants have appeal rights.

If an applicant doesn't notify them of changes, he or she must provide annual physical when boarded, but there is no requirement that applicants notify them when their condition changes. They have guidelines as to whether condition changes in terms of the renewal. The only time they would know is with the next 5-year physical. Mariner must possess evidence of the physical if boarded. The acceptable evidence would be another form. Unless the doctor calls in the results, the USCG may not know what is a disqualifying condition. The only time they would be informed of the results of an examination outside of the 5-year interval would occur is the mariner has a positive drug test, in that case the employer must notify the IO-investigating officer.

When USCG boards a vessel the mariner must have the most recent physical with them; however, the USCG person examining the documents would not know if the mariner's condition has changed. If the mariner has a pilotage requirement or endorsement-(Pilotage areas are designated by the OCMY, the USCG captain of the Port. Officer in charge of marine inspections), the mariner must obtain a physical annually. He did not know what the requirements were for Smith because he may not have been required to have annual physical. The pilotage routes don't expire, but must be renewed by number of trips. Holding a master or mates vessel you may sail as a pilot if you have completed 4 round trips during the period in which the license is valid.

The doctor would know what medications an applicant is taking, if not the physician, by the patient telling him. He can be taking a disqualifying medication and not be disqualified if the physical is given in 3rd year. The MD would list the medication on the form, and the person would not be disqualified.

The list of disqualifying medications or physical conditions needing further review: diabetes, cardiac problems, physical handicaps, and other things. With originals and raise in grades the form would be sent in.

Requirements for physician, is physician with a license number, (type not listed), physician's assistant, nurse practitioner. They do call doctors when there is something missing to get verification.

Biggest mistake in completing the examination form that he is aware of is when a mariner has uncorrected vision but the corrected vision given.

US Public Health hospital changed was sometime in the early 80s.

If a mariner is denied a medial, applicant can appeal within 30 days. First level is to the OCMI, if upheld by OCME, then it would go to the Commander 1st CG district, if upheld by them it goes to the NMC, if they deny it there is no further appeal.

He saw 5 appeals last year, for the office as a whole; he would estimate that he sees 3 a week. Medical waiver request, he would estimate 2 to 3 a day. He would estimate that about 90% are granted.

This office covers area between BOS and NYC, they go as far as the Connecticut River, to Albany, West to EWR, south to Toms River. There are 17 marine licensing areas.

The public health physicians are the ones who determine whether something is qualifying or not, He can't speak for what they use as qualifying or disqualifying. When the manual was written (in 1983) they used the Public Health guidelines, but he can't speak for what has happened since then. There have been changes every year but these are in the form of policy letters.

The policy letters are on the web, and they use the 1989 NAVIC (navigation vessel inspection circular)

They don't have a list of "blacklisted" doctors. Years ago there was an issue of doctors being paid off they were tipped off.

ANGELA BONGIORNO-Director of Personnel-Staten Island Ferries

Richard Smith's regular hours were from 1330 to 2130 for at least the previous month. Records will indicate schedule for the times before that, but Angela indicates that he had been working those hours for a year. The Tuesday before the accident, October 14, he had worked 1 ½ hours of overtime, until 2300.

Captain Gansas worked the same shift. On the day of the accident he was filling in for Capt. Cavella.

Capt. Smith talked to her in April or May about his request for a voluntary downgrade from Captain to Assistant Captain. The Ferry organization had announced that they would be cutting back from four ferries per hour in rush hour to three, and consequently, they would be laying off 32 employees among the various operating levels. Since Captain Smith was an "out of title" captain (a NYC civil service title), he was facing a lay off from the captain position. By voluntarily downgrading to his permanent position, he would not be downgraded, and would gain in seniority by going to a reduced rank.

Angela told him that by voluntarily stepping down, he could not automatically go to his Captain's position. The only way he could regain that position would be through the formal application process for a vacancy or from the promotion list. In other words, he would be just like another internal applicant and his previous employment in that position would not make a difference.

When he talked to her he seemed calm about it. He told her why he was doing it, and added another reason, that by voluntarily stepping down he would save another captain from lay off (that captain was Michael Gansas, who was acting as an "Out of Title" captain, a classification unique to the Staten Island Ferry). Someone acting in a "provisional" position gets the pay of that position while working in it, and while on his days off. Someone working as an "out of title" position gets the pay of that position only while working in it. On days off and otherwise, he gets the pay of his permanent title.

The layoffs lasted only 30 days. After that time the 4th ferry was restored and the laid off crewmembers called back. All but two, who had taken other jobs in the interim, were called back. Captain Smith had been the only crewmember to request the downgrade.

Morale was poor in May when the layoffs occurred, and when the crew was called back a month later, moral was improved, and was good.

MRS. LORRAINE SMITH

Mrs. Smith was accompanied by her representative, Joel Cohen. Under advice from her representative, Mrs. Smith did not provide information about statements that her husband made to her.

She and Richard Smith have been married about 20 years. Four children in all.

On the day of the accident she got up at 0600, he got up later, she doesn't know what time he got up. Her 8-month old grandson got up so she had to feed him. She was working that week and she gave the baby to their daughter so she could get ready for work. She is a data entry clerk for the Visiting Nurses of SI.

About 0815 she left for work. He was asleep at the time. She saw him sleeping. She goes home for lunch; on that day she got home about 1215. He was there with the baby and their daughter. She has two daughters at home and they were helping with the baby. The baby is her son's. She leaves work about 1215 and gets home around 1222. She was helping the daughter with the baby because the daughter was having trouble with diapering the baby.

Her husband was busy trying to fix a leak in the bathroom so they really didn't talk that much then. When she left she just said bye, because she had to be back by 1.

She got back to work, although she is not sure of what time, and after that she doesn't know about the times at which events occurred that day. She left to drop a bill off, and a co-worker said that her husband had called saying that there had been an accident in the ferry. She went to her desk, sat there for a minute, and then called her daughter who was at home and asked her if she had heard anything. The daughter had not heard anything so she asked her to tune in to NY One. The daughter did that and said that there had been an accident. She asked what side, and was told SI. She asked which ship and their daughter did not know.

Her husband then called her (she doesn't remember the time) at work. She then told her employer about the accident and that she had to get home. A friend drove her home and her boss followed her. She ran in the house, and her daughter Hallie was hysterically crying. She was holding the baby who was also crying. The daughter said that she didn't know what was going on. The daughter did not want Mrs. Smith to go upstairs but she went upstairs and he, Mr. Smith, was locked in the bathroom.

She was unable to get in. Her daughter was yelling, and trying to hold her. She was yelling. She was trying to find a screwdriver to open the door. She doesn't know how long she waited before two men from the ferry who knew Richard Smith, Gene Grady and John White, arrived. They all ran upstairs. He wouldn't

come out of the bathroom so they forced open the door and one of them called 911, and she went in.

He was on the floor; his wrist was bleeding. She put a towel on his wrist since she felt that it would help, then she noticed that he had shot himself. She did not see the pellet gun.

She was able to see him at the hospital, although not immediately, he went into surgery. Next time she saw him he had the breathing tube down his mouth. She was able to talk to him just recently. He was not making any sense.

He took blood pressure medicine, cholesterol medicine, and medication for a problem with prostate. He had herniated disk in his back, and he was taking medication for his back only when it hurt him, which was like when he worked in the yard. He had trouble sleeping and was taking Ambien. She is not sure how often he took him. She doesn't know whether he took it the night before the accident. He would not take a full dose, but would break the pill in half and only take half.

He came home around 11 the night before the accident; she cooked dinner for him. They had the baby, the baby was sleeping but kept waking up. The baby got up at 1030 and again at 0100. Just a regular night except that the baby was there. They talked about routine stuff, they were having fun with the baby, that was the big thing, the baby was there for 1 ½ weeks. The baby was there because the dad, their son, got married and they went on the honeymoon.

Ordinarily he, Mr. Smith, would go upstairs after dinner, she would clean up the dishes, and then she would go up. They would watch television after dinner, upstairs in their bedroom. The night before the accident there was nothing out of the ordinary. They were both up when the baby got up at 0100. She went down and took care of the baby. She was up when her daughter Hallie came in, she works in Hollywood Video, a little after 0100. She brought the baby upstairs, gave him a bottle, then everyone went to sleep, about 0115-0130.

His health was good. He had high blood pressure, cholesterol, back pains. He was seeing physicians for these and was seeing a dentist.

He smoked 10 years ago but gave it up. He gave it up because it was bad for him. He just gave it up, just quit. He was OK with that.

She described their financial situation as good or normal. They have two children in college; they weren't planning for any major expenditures until their children finish college. One is a student at Hunter College and one to College of Staten Island.

She does not know about what time he got up that day.

When she saw him that day his mood was "fine," he was happy. She was working on Tuesday and she had gotten up and left the house that morning at 0815; he was still asleep. Monday he was off. They had to bring a car in and she was going to drive him to the place and he was going to drop her off at work. He got up with her on Monday. She got up at 0530, and he got up around 0700.

Sunday he was off, and they went to sleep but she doesn't remember what time he went to sleep. They had the baby on Sunday. On Sunday morning she had the baby so she did not sleep late because she had to take care of the baby, but she does not remember what time he got up on the Sunday before the accident.

He was feeling good about the downgrade in his position because he was working as an "Out of Title" captain and he felt that it would be better to be assistant captain because it was more secure, and he got better vacation times since he was no longer at the bottom of the seniority ladder. He got more overtime as a result, and therefore ending up making more money.

One time, about 10 years ago, he lost weight and was taking the same blood pressure medicine, but it was too much and he felt dizzy, he went to the doctor and they gave him a lower dose. This was when he gave up smoking. This is the only episode she remembers that may have resembled the episode he was described as having at the time of the accident.

She does not remember meeting Captain Gansas, although his picture looks familiar to her. Some of the people that he worked with he hung out with. One was someone who just died. Frank Dedario was probably his closest friend from work, the rest were acquaintances.

Before the accident he was normal, happy, and busy playing with the baby. He was planning to work until he was eligible to retire. They talked about going upstate after retirement, her son works there. He was probably going to continue with his painting. His hobby was oil painting, although he had done sketches. Fixing the house was another activity. He built models of boats, and he took an interest in gardening. They had gotten rid of the pool in the back and they fixed up the back yard. They have 3 big oak trees out back and as a result the pool was always cold, the kids were getting older and not going into it.

He is a little better now than when they first saw him after the accident. He's worried about everybody who was hurt in the accident.

There is a regulation about physicals, but she doesn't know how often he got physical examinations as a result of the requirement. He liked the ferry operations. He felt that this was the top of his profession. He had started as a deckhand on a tugboat. She doesn't know about his attitude about the company.

NYC Department of Transportation

In attendance, Marlene Hochstadt-Asst. Commissioner of Human Resources, , Gordon Goldberg-Director of Labor Relations, Jean Frankowski-Director of Personnel, and Ann Taylor-Legal Counsel

At the time of the accident both Captain Gansas was acting as a captain in a "provisional" appointment. The only way to achieve permanent status is the civil service is to take the appropriate civil service test that DCAS, the New York City personnel department established for that position, and to be on the civil service list for that position. Provisional employees have no rights to appeal during the first two years of their employment. After that they are entitled to a hearing.

The DCAS medical requirements are, in effect, the requirements established by the relevant agency, which, in the case of Staten Island Ferry, is the Coast Guard. Similarly, other city personnel follow the appropriate medical requirements for their position, such as truck drivers. The Coast Guard established five types of drug screens for those in safety sensitive positions. These include random testing in which 50% of the population is tested every year for drugs and 10% for alcohol. If a test comes up positive, that person must have a negative result on a return to duty test, and he or she will be randomly tested afterwards. Others include pre-employment screening, periodic testing, post-accident testing and reasonable cause testing, where two personnel in a higher position than the person in question have reasonable cause to test that person.

The city DCAS administers a test for each competitive position title. Every crewmember on the ferry must pass the test appropriate for their position title. Tests for captain are administered, first a "Technical Oral Test" is administered; this covers a range of job requirements. If the applicant passes that, they must take a "Qualifying Practical Test," in which they must operate the vessel on a run, from departure to docking.

The last time the test was administered for Captain was in September 1991. The last time the test was administered for Assistant Captain was August 1999. The "Promotion Test" is only open to those who are already employed in positions lower than the title for which the test is given. Thus, for Captain only those who are Assistant Captains, Mates, or Deckhands can take the test. For Assistant Captains, only Mates or Deckhands can do so. That is, the Mates, Deckhands and Assistant Captains must be filling those positions permanently or be on a "preferred list," which contains those who have been laid off and are thus given preference for openings in similar jobs. Those in a lower level position can take a test in that lower level in order to become "permanent" in the lower level position.

The captain and assistant captain at the time of the accident both hold permanent positions in the New York Civil Service. If there is a vacancy on any one day qualified personnel, i.e., those who hold the proper license and are approved by their supervisors, can serve in the higher position. On the day of the

accident the Captain, who was permanently in a lower position, was serving as captain because there was a vacancy. One of the captains was out.

JOHN MAULDIN-Port Captain, NYC Dept of Transportation. Div of Pax Transport, SI Ferry,

He has been employed with them 26 years.

He started out in 1977 as a deckhand, in 81 got his 1st class pilots license, 82 became Asst Capt, 85 to Capt. and in 1995 Port Captain. He left that position when a new Dir. Of Ferries came onboard and returned to the ferries, he thinks this was 97, and came back as a Port Captain, maybe 99 and has been there since.

Basic responsibilities include daily operating functions of the ferry, such as scheduling, fueling, informing the crews of any and all changes in USCG regulations, making sure all required drills are carried out, and now includes terminal operations as well.

His office has a staff of another port captain, a port mate and 3 port engineers. Director of Ferry Operations, Capt. Patrick Ryan is his immediate supervisor. He supervises the staff at the port office, the staff of the ferry personnel at both terminals and all operational boats.

Capt. Gansas and Smith both report to him. He knows Capt. Gansas. Has been his supervisor at least 4 years, and for a period of time Michael was a deckhand when he was captain.

Capt. Gansas is competent, needs little if any supervision in carrying out his duties. From the very first day that he met him he has been like this. Never had to reprimand or discipline him. He doesn't recall if he commended him. He encouraged him to take the courses needed to get his pilots' licenses. When he was a deckhand he became interested in the pilothouse and wanted to become a pilot.

The Barberi class boat has different kind of propulsion system (like a helo), and has a different kind of steering wheel, not the big one. He, John, has been here since the Barberi class was delivered and was here when the captains learned to use it. He has never seen anyone steer this as well as Michael Gansas did, that is why he encouraged Gansas to go for his pilots' license, to John, Michael was a natural.

They captains are to be in the operating end of the vessel. This is a policy, but he is not sure that it is written.

He doesn't know why someone would think it unusual.

Between Capt. Maulden and the other captain they make various trips from the ferry from time to time. The trips are unscheduled and there is no number of how

many should be done. He we guess that at least once a day they will go out to the boats, at least once or twice a day they will go out, there are many reasons why they would go out.

It's hard to say on the average how many are done. Unless there was a reason to talk to the master alone, in the pilothouse, he has never seen only one pilot in the pilothouse.

The written policies would be with the director, Capt. Ryan. Licenses that are required are established by the USCG, ferry.

A deckhand would need three years as a deckhand, get a 1st class pilots license, work on that license for at least one year, then obtain a masters license, so it will take 4 years or better. As a deckhand they would stand wheel watches, during the years that they are working on the boat preparing they would gain experience, then once they got their license they would post it in the office, then when the job would be available (vacancy) they would interview them, ask them questions, and based on their answers either appoint them or not.

He has rejected maybe two out of eight (approximately) applicants for captain/assistant captain since 1999. They didn't give the right answers on the questions. When they become permanent in that title (rather than an appointment), they would get a specific test that they would have to answer, this is a city wide administrative test. No specific test of knowledge.

They are required to maintain their USCG license, they do this themselves.

Capt. Smith, knew him about 15 years, as long as Richey has been here. Capt. Smith is a good man, good employee, competent. He doesn't know anything else to say. Always been a great guy. Never interacted with Mike Gansas (other than a SI Ferry picnic-in 95, they might have been there). He does not socialize with either one.

He has not written a reprimand to Capt. Smith. Never recalls any experience like what the press reported about Capt. Smith (being fired for insubordination, then getting his job back after union appeal) this is simply not true.

He looked at their personnel records after the accident. This is a normal thing after some event, e.g., hurt or gets ill, to get the start date of the employees, that is the only reason that he looked through the records.

He is not the type of supervisor who would put something in writing, he would just go up to the individual and say nice things to them, in his belief this would be done in person to have an effect. He has done this with Capt. Gansas. He, John, was very proud when Capt. Gansas got his license, he was his protégé.

He does not recall ever getting a report that only one pilot was in the deckhouse, while the vessel is underway with passengers. Some of the vessel requires Kennedy class, requires one in each pilothouse while pax are not on board. This is during operations when passengers are not on board. He has never heard of this while in normal operations with pax on board.

Safety is the first thing they look at in evaluations, then being on time. The ferries carry a lot of people, 20 million a year, Safety is the No. 1 priority, this is the basic standard criteria they use. If he sees other issues that raise a red flag he will bring them to the attention of the director, they will sit the individual down and talk to them, this has never happened with these guys. Has never had to discipline either one on timeliness, he thinks that their on-time rating is 98.4%, and they have over 100 trips a day, sometimes there is vessel traffic, but never with these guys.

Their licenses are on file in the personnel office, but it is their responsibility to make sure that their licenses are current. ON occasion they have had guys being on the wire, some have forgotten and they had to wait until their license got renewed. Usually the individual himself will stay on top of it.

There is an evaluation done on each employee once a year. Some of them he would do, some the director does. The captains would do their crews. The chief engineers would do their crews, the port engineers would do the chief engineers, the ferry terminal supervisors would do the deck hands who work in the terminal.

Either he or Capt. Joe Ecock would have completed the evaluations.

The medical requirements are established by the USCG to obtain their license, if they have a medical condition they are required to note that on their application, and a medical review board would oversee this and would OK and give their direction as to what has to be done. One requirement is for eyeglasses, e.g., to keep a spare with them at all times while on duty.

They would know what medical information was noted on license. Never encountered a situation where someone licensed did not inform the USCG of a medical conditions. No medical limitations of Capt. Gansas or Smith. There is a requirement that is part of the CFR that prohibits certain medications while on duty, it is tied to the drug testing policy.

He has been with the ferries 26 years going on 27, this is a devastating thing. The people the next day, the passengers, they all came back the next day.

He spoke to the vessel on the bay station. Someone had said that the Barberi is docking at 69th St. the old ferry to Brooklyn, he came out and saw the ferry in that general direction, he went on the radio and asked what's going on and Michael

said that "I'm having trouble, trouble getting power," he could tell in his voice that something was wrong.

He has had experience with jumpers, suicide attempts and he could tell from the voice when something is wrong. There was a tugboat at the facility that kept calling the ferry and he Michael was answering them. He called Michael back, He, Gansas had said that they hit the ferry, there were lots of injured people. He told him that the tug was there trying to help. He told him that they needed to get the tug to help him (19A frequency) get it back into a slip to help the injured. This tug is under contract to them. This tug was here because the fuel barges were at the facility, the tug had brought one of the barges and it was laying near where the boat hit.

JOSEPH ECOCK-Port Captain

He started as a deckhand in 1990, became mate 91, assistant captain 92, captain since end of 92 up until 2001 when he became port captain. Before that was a captain on supply boats, crew boats, got his captain license in 79. He took different USCG licenses.

He ensures that crews are on the boats, boats go back and forth, respond to anything out of the ordinary, everything that goes on in the operation of the boats, where they tie up at night, fueling vessels, shipyard work, scheduling them for that, everything that has to be done with the boats.

John Mauldin works in morning, he usually works at night. Both are supervisors of Cpts. Smith and Gansas.

Mike Gansas was his assistant captain, he was with him when they saved 3 people in a boat that had capsized, he did a great job on that, but he really didn't work with Richey Smith that much. But he would usually see him operate as captain at least once a day. He would talk to them and then talk to John based on what he saw. He would review terrorist stuff with them post 9/11 and ask them what they would do.

Captain is captain of the vessel, as long as he knows that there is a qualified person in the pilot house, there is nothing written in there. As the captain, he is the master of the vessel, he is in charge, if he had to leave the pilothouse, like to use the bathroom, if he knows that everything is OK, then its OK. He has never seen anything written that says that you couldn't do it.

He hasn't seen a master document that lists procedures on how the vessel is to be operated.

Capt. Gansas, is a very good captain, he keeps every on line, everyone likes him, if they ask him to stay extra he does, never had a problem with him.

Capt. Smith is the same way. He is well liked, is willing to help out when asked, not a problem. Never had to discipline either one. Never had to discipline any other captain as the port captain.

Not aware of any medical condition affecting either one, none was taking medication. The ferry policy is to leave it up to the individual to tell them, he is expected to follow. If he goes out on injury he is required to be certified fit for duty. No policy regarding that.

Capt. Gansas is more experienced than others, has been at it for several years. Compared to Captain Smith, about the same, he has been longer than Mike Gansas.

If the captain thinks someone is qualified, the mate can do the docking, that is why they have the pilot on board.

The assistant captain puts things down in log on required drills and the captain signs it, or some captains do it all themselves, then the USCG will review it to make sure that they are done.

Whole crew comes in when they sign in and they grab the radios to make sure that they can communicate, that is how they know that the boat has full crew when everyone signs out.

If winds are over 35 mph sustained winds they will close the bridge deck on the car boats. There are no restrictions on the Barberi class since that is more maneuverable, that is for stability, no weather related restrictions on the Barberi class, unless captain of the port decides to shut things down, this has not happened to his knowledge.

Those two guys are good captains, a lot of experience between the both of them.

NATIONAL MARITIME CENTER

Members of the Coast Guard National Maritime Center were interviewed on January 12, 2004, to learn more about Coast Guard medical requirements for mariners. Ernest J. Fink, the Commanding Officer, Stewart A. Walker, the Branch Chief-Licensing and Evaluation Branch, Betty Garner-Marine Transportation Specialist, as well as Christopher F. Murray, Attorney, Office of the Chief Counsel, were present during the interview. Also present were Barry Strauch, Morgan Turrell, and Mitch Garber, of the NTSB and Lt. Mark Bottiglieri, USCG. Dr. Edwin Jones, USPHS, joined the interview when it was about two thirds of the way completed.

Physical examination reports that mariners obtain (form CG-719K), go to the Regional Exam Center (REC), where the applications are sent to one of the evaluators. The evaluators use the policy, regulations, and guidance published in the Marine Safety Manual, a USCG publication applicable to the entire marine safety area, and the medical guidance in NVIC. The evaluators have to qualify through an internal training program, which covers medical issues in addition to other topics relevant to the review of merchant mariner applications. The training program is run at the local REC, with the evaluators completing a series of on-the-job “qualifications.”

The evaluators can make one of three decisions regarding the medical status of the applicant: 1) qualified, 2) not qualified, or 3) not qualified but by a “very minor” disqualifying factor and in fact, may be able to do their job safely. If 3) they will send the application forward to the National Maritime Center (NMC) with the recommendation that a waiver be granted.

If the REC evaluators have questions on the applications they call Ms. Garner. NMC in general receives about 50 to 60,000 applications a year. Of those about 1200 to 1400 come in with recommendations for waivers. The NMC doesn't know how many are denied at the local level. Those numbers are not tracked by the NMC [they may be tracked at the local level].

If someone submits an application that is denied, the application is entered into an electronic database . If the applicant then reapplied, the results would show up when he or she reapplied. The system is queried for each application the evaluator would then become aware of any previous denials. The paperwork for each application is retained in a central repository [is that right? – I thought that the paperwork was retained locally, and just the results entered into the central database]..

Once the medical approval is granted mariners don't have to turn anything into the USCG for another five years, but pilots must have an annual physical and the USCG may review the results, a review that would be carried out by the local CG office. It is assumed that local CG activities personnel would come to the NMC if

they have any questions. The NMC job is to issue licenses, not to take them away. If a pilot became medically disqualified, they would be charged under suspension and revocation proceedings, and that would come under a different office, not NMC.

NMC personnel indicated that Charleston, SC, regularly reviews the annual medicals because they hear questions from them regularly regarding such reviews.

If someone develops a medical condition that could be disqualifying, e.g., multiple sclerosis, there is no requirement to inform the CG of the disqualifying condition. If the CG becomes aware of a medical problem with a mariner, it would be investigated. In that case the CG could begin suspension and revocation proceedings, or the person can deposit his license with the CG voluntarily until his condition gets better. An examiner who finds someone disqualified medically, could call any CG office and talk to the safety office. There is no formal mechanism to notify the CG that way.

If the doctor selects option 3) on the physical evaluation form (needs further review), the form would go to the NMC and Ms. Garner would review it to see that the supporting documentation is provided. She will then send the material to Dr. Ramirez, who will review it. He may request assistance from medical specialists. Ultimately they will get a report with a recommendation that the waiver be either granted or denied.

NMC has no physicians who work directly for NMC. There are some who work for the CG Personnel Command, Dr. Jones is the head of the group, and Drs. Ramirez and Jones have collateral duties working with NMC. They are both Public Health Service physicians on active assignment with the Coast Guard.

Dr. Ramirez and others could ask for additional information. Ms. Garner would then contact the REC (regional examination center) to ask for additional information, and the NMC would then contact the mariner.

If an applicant is turned down by an examiner, there is nothing to prevent an applicant from going to another MD who could recommend that the mariner be medically qualified. The CG has recently extensively modified the examination form, which now provides additional information on the application to help the examiners. There is no CG requirement that an applicant found unqualified provide the form to the CG nor any requirement for the examiner to notify the CG in such a case.

How do the RECs follow up on examiners who are approving a lot of applications? Stuart Walker has talked to the chiefs of the RECs and they know who the "good" examiners are and those who approve a lot of applicants. But, there really is no way to check on the examiners since, unless the mariner has a

visible disqualifying condition, NMC will take the word of a licensed examiner, although they do not determine whether the examiner is licensed. There are ways, however, that the REC will follow up on applicants, e.g., someone who could not pass the color blindness test and then does pass, they can follow up (e.g. request additional information) to determine how the person's condition changed.

Mr. Walker does not know if NMC follows up on applicants with disqualifying conditions who later are considered medically qualified. If this is done, it is done outside the standard, on their own. If someone moves to another locale, his hardcopy file will not follow him, though he will still be in the electronic database. Waivers will show up on the MMLD, the national CG database, but relatively little else is accessible to the NMC personnel.

Waivers include eyeglasses to meet the vision requirements, in which case they are required to wear or possess the eyeglasses and retain a second pair on the vessel. The goal is to keep the person qualified as long as they can safely do their job. In some cases waivers may be issued that limit the mariner to a particular vessel.

NMC doesn't check on regions to see that determinations of fitness are consistently reached. All RECs use the same guidance. NMC provides the guidance and it is up to the REC to see that the guidance is applied equally. The evaluators are trained at the unit. There is annual training after that but it is not required. The training is not set up in a formal course. The REC evaluators have to demonstrate that they can do different things required of them in a competent manner.

NMC gets questions on a daily basis from the RECs. It depends on the applications. The questions go to Ms. Garner and may come via phone or e-mail. NY region would be in the middle in number of the calls they get. She gets maybe 5 to 10 calls per day.

NMC is aware of only one instance in which an examiner fraudulently completing an application. The CGIS would be notified of a fraudulent application. This actually happened recently, where a person was in a wheelchair and was considered fit. The mariner was then reported by someone else who saw him or her on a wheelchair.

NMC doesn't keep a count of the examiners, they don't track how many applications are completed by a single examiner. Because the files are not filed by examiners it is almost impossible currently to track examiners.

The NMC physicians review applications sent for further review and they would make a decision as to whether the person is fit or not. There is no list of medications that are prohibited. Medication use is considered in terms of the

condition calling for the medication, and whether the condition is under control as a result of the medication. The reviewing examiners would refer to the Physician's Desk Reference (PDR) if they had any questions about a medication.

The form asks for the side effects of the medications taken. NMC gets a lot of questions about medications, including the length time the mariners have taken medications. Medication use may or may not cause an application to be sent down to NMC for review. Medication use can be disapproved in one region, approved in another, and asked for further qualification in another. In response to this and other potential inconsistencies, the CG is considering centralizing the evaluation process. It is anticipated that if approved and everything goes well the centralization will be fully implemented by the Spring/Summer of 2007.

Applicants sign statements indicating that they acknowledge the penalties for not honestly completing the application form. There have been instances of people failing to provide information about criminal background, this was found in conjunction with security reviews. The NMC staff is not aware of enforcement investigations caused by failure to provide medical information. If it was learned that a mariner was not honest on a medical examination form, the CG would likely go after his license, but would not send it to the US attorney because it is a relatively minor offense.

There is nothing to stop mariners from not forwarding physical evaluation forms in which the person is found not qualified, and then going to another physician who finds him/her qualified and submitting that evaluation form. There is no effort underway to get the physicians to send the application form rather than the applicant. This has not been discussed much within the CG.

The regulation is not as specific as to the non-regulatory guidance(the NVIC) the examiners are given as to consider conditions disqualifying or not. No instructions given to the mariner as to what to do with the form.

Mariners will voluntarily deposit the form with the CG for temporary things such as broken arms, legs, etc. The examiner presumably would complete the box "needs further review" if the examiner wants more information, if for example, he/she is not the applicant's primary physician. The assumption is that the examiner will say, before I grant this I will need more information such as by a stress test.

They have a draft revision of the NVIC in the works that will probably be out in 6 months. This will provide guidance not in the form 719K. The current NVIC was issued in 98, before that was 92. There is no requirement that it be reviewed on a regular basis. The NVIC is available on the web site and the form tells physicians them to refer to it. CG finds that there are a number examiners who do a lot of marine physicals and are familiar with the available guidance. The problem they have typically is with the examiners who don't do that many.

The most common conditions that are under review at the NMC are heart conditions and diabetes. For example, someone had a heart attack 8 years ago, but if the last stress test was 6 years ago, they will require a recent stress test. Cardiovascular disease is the biggest problem, but they are finding more and more diabetes, and also hypertension.

There is an appeal process available to mariners denied the medical. Three levels, one at the REC, then a formal appeal to the district commander, and finally to the commandant, which comes to the NMC. It is "very seldom" that it comes to the commandant.

There are cases where an a Coast Guard physician has recommended denial of a waiver and NMC approved them. Stuart Walker directs Ms. Garner to notify the REC in waiver cases, so he has the responsibility for each waiver. This happens rarely, e.g., once every two or three years. The NMC's intent is to keep the person gainfully employed as long as he/she can do it safely continue employment,, they will make various limitations on the application, by restricting the person's activities if need be..

Regulations permit use of other forms, provided that the examination was carried out in accordance with CG standards. They accept military physicals, but Mr. Walker would have to see the scope of the exam.

Dr. Jones- USPHS – attached to USCG, joined the interview at this point. -he graduated Duke, undergraduate and Duke University School of Medicine, completed residency at Baylor in pediatrics in 1973. He has been with USPHS since 73 on and off, and with the CG since 93, reviewing waivers for both active duty CG personnel and mariners since then.

If the physicians have subspecialty concerns, e.g., someone with MS and they need a neurology question, they will refer back to the specialist treating the person, and they will ask how is he/she now, and they (CG physicians) know that their decisions can be appealed in court. They will ask the specialist, given these circumstances, what conditions do you think can cause concern, if a cardiac problem they will ask the cardiologist the prognosis for a heart attack (MI), in a situation requiring a labor intensive activity, e.g., fire on board. Dr Jones indicated that he will put the burden, as much as possible, on the specialist. They also have specialists available at the National Navy Medical Center, Dr. Jones reviewed waivers for accession to the CG for a number of years and was on the staff of the Navy hospital so he can ask the specialists then. Such consults are either on the phone or person-to-person, but no formal written consultations are performed.

With MS, because of the possibility of rapid onset of sudden debilitating weakness, Dr. Jones would ask the treating neurologist the possibility of this

suddenly developing. If the specialist says no, which is different than his own experience, Dr. Jones may consult with a neurologist at the Navy hospital and he would typically not grant a waiver, but if both the treating and Navy specialists did say that the patient was OK, he would recommend a limited waiver be granted and that the mariner be evaluated annually.

Other conditions, e.g., insomnia or sleep apnea where no specialist was involved, Dr. Jones would put the question to the primary physician, in your opinion is this mariner drowsy during the day, and see what his answer was. If the answer says he's not drowsy, and doesn't need a sleep apnea machine, Dr. Jones would think that the condition is not debilitating and would grant him a waiver. If the person was on a machine and the examiner said that there was no daily impairment, he would recommend a waiver. Today the CG will allow people to remain in if they were on a machine that was controlling their sleep apnea. There is no requirement for a sleep latency study or sleep study. It's up to the physician, Dr. Jones doesn't require it. He would not talk to the examiner in that case but would go by the written statement of the examiner.

Medical treatment of sleep disorders, e.g., the mariner has been on Ambien or Sonata for a year or two, Dr. Jones would not tend to recommend a waiver in that case since if the person needs the Ambien to help him, and if he performs nighttime duty he may not be able to function. He would not grant a waiver if someone is taking narcotics for any reason because of the likelihood of drowsiness. In case of Tramadol, Dr. Jones would send the request back to the treating physician, he would ask the , "is he drowsy," unless they had information from his employer or others that they observed the person drowsy.

There are a number of antihistamines that in non aviation CG personnel do not require waivers, they would not ask for any input on drowsiness on antihistamines, or even Elevel, Prozac, etc. Dr. Jones indicated that he would ask for input from the physician regarding the potential for drowsiness from certain antidepressants such as Elavil, but not with newer antidepressants such as Prozac. As long as the treating physician believes that the medication is controlling the condition without side effects they will usually grant a waiver. Dr. Jones would not ask for additional information regarding Tramadol . He indicated it would be very difficult to assess any potential risk of sudden incapacitation due to medication like Tramadol.

If the treating physician says the person is not having problems the NMC will almost always go with what that physician says. If that changes, hopefully the mariner will go to the ship's doctor and say that they are having problems. He relies a lot on the physician but Dr. Jones may request that a specialist be involved in the evaluation. They do not consider Board certification of the physician in the evaluation.

Dr. Jones reviews about 15 to 20 physical evaluation forms a week, probably 10% does he follow up on, maybe one a year will he seek a consult with the Navy hospital. His main concern is the mariner's response to an emergency, going up down a ladder, fight a fire, etc., be effective. If so, Dr. Jones will write that in his request for additional information to the treating physician.

There is no program for medical evaluation of alcoholics on CG active duty. No similar program for civilian mariners. He does not run into a problem of physicians not being aware of current information on side effects, Dr. Jones is interested in impairment of judgment or drowsiness and these are the two that he will focus on in reviewing medication use. He cannot think of other side effects of medications that would be disqualifying. He will consult the PDR if necessary. Dr. Jones could not think of any drugs off hand where he did consult the PDR.

He will put more weight on the evaluation of a physician than on a nurse practitioner. Chiropractors are not permitted to evaluate mariners. He has never consulted with a specialist in occupational medicine. He is in fact leaving this billet to go into an occupational medicine billet in HQ and will be taking training in it in Cincinnati. He will take four one-week courses at the U of Cincinnati School of Medicine.

When Dr. Jones looks at a waiver he asks 1) is it likely to affect their health, 2) can they do their job, and 3) can they react in an emergency situation? They do roughly 1200 to 1400 a year, and Dr. Jones is the final physician approving authority on these. For 3 years Dr. Ramirez was doing all of them but then she got involved in disability claims.

He knows of one physical evaluation that got involved in court and Dr. Jones provided expert testimony by phone. The ship company brought it to their attention that the mariner should not have had the waiver.

To him the big waiver requests involve cardiac conditions and psychotropic medicine use. Someone with chronic back pain is generally on narcotics and in that case the evaluation would not be approved, however, if the mariner is taking Advil then it is OK and the license will be granted.

Stuart Walker agreed to provide the team with qualifications of evaluators, number of applicants denied for medical reasons, and whether any RECs routinely check previous applications.