



U.S. COAST GUARD INVESTIGATOR STATEMENT

Matter Under Investigation: Allision involving the Passenger Vessel CARNIVAL HORIZON and Manhattan Cruise Terminal's Pier 90 on August 28th, 2018 at approximately 0548.

On 04 September 2018, I attended an interview with Kevin Gadow, who was the docking Pilot for the CARNIVAL HORIZON on August 28th 2018, at the time of the allision. Also in attendance were Andre Stuckey, Executive Director; Mark Clark, NJ Marine Investigator; [REDACTED], USCG Sector New York Investigator; Luke Wisniewski, NTSB Representative; Frank Keane, Executive Director, New York Commission; and Jim Mercante, Esq. Counsel for Mr. Gadow.

According Mr. Gadow's recollection, this was his third time piloting the CARNIVAL HORIZON into Pier 88 and the previous two times he successfully moored the vessel at the pier without incident. Mr. Gadow, did state several times throughout the interview that it is a very tight mooring arrangement for a ship the size of the CARNIVAL HORIZON. Mr. Gadow recalled the environmental conditions to be a 2.3 knot ebb current with light breeze, unlimited visibility and no other vessels in immediate vicinity. He stated that he determined the current by conducting a set and drift aboard the Towing Vessel JRT MORAN prior to boarding the CARNIVAL HORIZON near Pier 76. When Mr. Gadow boarded the CARNIVAL HORIZON, he conducted a pass down with Sandy Hook Pilot, Matthew Haley and discussed the game plan with the ship's crew (discussion recorded by VDR). Mr. Gadow also asserted that he signed a pilot card and left it aboard the ship (ship's Master stated that Mr. Gadow did not do this during a prior interview). Mr. Gadow stated that he did not know where exactly the ship's crewmembers posted as lookouts and assumed that the crewmembers at the bow were assigned as lookouts. He attributed the allision to being misinformed by the distances given to him by the lookout on the forward mooring station, stating that he was making his decisions and maneuver commands based on the distances given to him by the lookouts. He emphasized that given the tight maneuvering required for this mooring evolution there is no room for this type of error.

When discussing the conversation between the Master and himself regarding the placement of the JRT MORAN, Mr. Gadow explained that the CARNIVAL HORIZON has a very weak bow thruster arrangement and the slip is extremely tight for a ship that size. He wanted the JRT MORAN to be in a position so that it has a way to safely get out of the way during the maneuver into the slip. He elaborated on this determination stating that the ship is so heavily influenced by the strong ebb current that the JRT MORAN needs to be able to quickly get out of the way after the turn into the slip so it does not get caught and crushed between the ship and the pier. Mr. Gadow also reiterated that the slip at Pier 88 is very tight for a ship the size of the CARNIVAL HORIZON, recalling that the slip was reduced in width from 380 feet to 305 feet several years ago when a loading apron was added to the pier.

Mr. Gadow has a total of 34 years of maritime experience and has been a licensed pilot since 2005.

[REDACTED]
Date: 03 December 2018
Investigating Officer
USCG, Sector New York



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On August 28th, 2018, [REDACTED] and I arrived at Manhattan Cruise Terminal to assess the damage caused by the allision between the CARNIVAL HORIZON and Pier 90. When we arrived, the CARNIVAL HORIZON was moored, starboard side to Pier 88, which is immediately to the south of Pier 90 along Manhattan's western shore.

We first went to the roof of Pier 88, where we saw the damage caused by the allision at the southwest corner of the pier. There was significant structural damage to the framing holding up the parking lot located on the roof of Pier 90. We photographed the damage from several angles for evidence. We then photographed the damage to the CARNIVAL HORIZON, which was at the ship's bow. There were dents and scrapes to the hull at the ship's bow and a light mast was damaged and nearly torn off of the deck.

[REDACTED] and I then entered the CARNIVAL HORIZON and were escorted to the forward mooring station on Deck Three where the Ship's master and other crewmembers were accompanying Coast Guard Port State Control Examiners. The examiners conducted their examination while [REDACTED] and I took more photographs of damage to both Pier 90 and the ship. Once the examiners were complete, we went to the ship's bridge where we began discussing the incident and surrounding circumstances with the Master and photographing areas and instruments within the navigation bridge.

During our discussion with the ship's Master, he explained to us that at the time of the allision, he was operating the ship's propulsion and steering controls from the starboard bridge wing while the docking pilot was giving the conning commands and directing the Towing Vessel JRT MORAN, which was traveling up against the ship's hull at the starboard bow, near the bow thrusters. Also on the bridge was the Staff Captain, who was acting as the administrator and maintaining radio communications with the bridge and various lookouts during the mooring evolution. The 2nd officer was the officer of the watch and was at the center console monitoring navigation equipment. A cadet officer was beside the 2nd officer, making entries into the ship's bell book. A quartermaster was acting as a lookout on the port bridge wing. The Hudson River Pilot was also onboard but had no specific duties with regard to the mooring of the vessel and was no longer providing any navigational direction.

[REDACTED]
Date: 06 September 2018
Investigating Officer
USCG, Sector New York



U.S. COAST GUARD INVESTIGATION OFFICER SUMMARY

Matter Under Investigation: USCG Investigation involving CARNIVAL HORIZON (IMO 9767091) allision to Manhattan Cruise Terminal, Pier 90, on 28 August 2018.

Date/Time: September 04, 2018/1030

Location: USCG Sector New York, 212 Coast Guard Drive, Staten Island, NY.

Interview of: Mr. Kevin Gadow

In attendance: [REDACTED] and [REDACTED] USCG. Mr. Luke Wisniewski, NTSB. Ms. Andre Stucky, Executive Director of NJ Maritime Pilot & Docking Pilot Commission. Mr. Mark Clark, NJ Marine Investigator. Mr. Frank Keane, Executive Director of New York Commission. Mr. Jim Mercante as Esq. Counsel for Mr. Gadow.

Mr. Kevin Gadow is a docking pilot with the New Jersey Maritime Pilot & Docking Pilot Commission. He resides at 130 Humphry Ave, Bayonne NJ. Mr. Gadow had acted as docking pilot for the CARNIVAL HORIZON at pier 88 a total of 3 times, with no prior issues reported. Mr. Gadow stated he had docked other vessels in the similar areas numerous times.

On 28 August 2018, Mr. Gadow was aboard the CARNIVAL HORIZON acting as conning officer, giving orders to the towing vessel JRT MORAN and to the master of the CARNIVAL HORIZON in a docking evolution to Pier 88, Manhattan Cruise terminal. He was located on the enclosed starboard bridge wing with the master, staff captain, and Sandy Hook pilot. He held communications via a VHF radio with the towing vessel JRT MORAN. He described the weather as clear, light breeze, unlimited visibility, with an ebb current on the Hudson River of 2.3 knots. Mr. Gadow stated that he determined the ebb current amount while aboard the vessel JRT MORAN, prior to transfer to the CARNIVAL HORIZON, in which the vessel stopped and drifted with the current. He stated: he boarded the vessel in vicinity of pier 76, at a speed of approximately 7 knots. Mr. Gadow stated that he did not believe there to be any mechanical failure to the JRT MORAN or CARNIVAL HORIZON on 28AUG18.

Mr. Gadow stated: he spoke briefly with the Sandy Hook pilot, Mr. Matthew Haley, and then with the master of CARNIVAL HORIZON, prior to having the conn turned over to him. Mr. Gadow stated: he discussed, with the master, the placement of the towing vessel for the docking evolution. The master suggested to Mr. Gadow to place the vessel amidships, on the starboard side. Mr. Gadow stated: he did not agree with the master's assessment, and recommended to have the tug placed forward on the starboard side, just aft of the bow thrusters. He did not recall any opposition after his discussion with the master, and he was to the understanding the master had agreed to the plan of towing vessel placement. Mr. Gadow stated: the purpose was to allow for the slowing down of the bow during the turn and keep the bow up against the current, while also allowing for quick movement of the tug vessel, should it be placed in a position of being "pinched" between the pier and the cruise ship. He stated: the purpose of having the vessel more north was to allow the current to push down on the vessel, once the broad side was exposed, into the slip while having the towing vessel slow the bow swing. He recalled: in conversation between him and the master, the master made mention of the vessel's capability of the bow thrusters as being "weak." Mr. Gadow stated his plan was to come closer and more up, or more north to pier 90, compared to previous times in which Mr. Gadow had docked the vessel.

Mr. Gadow stated: he was informed for the distance from the wing to stem, of being 140 feet, and also had been given the distance in terms of meters. He stated: he knew of the towing vessel location as



he was able to look down at it from his position on the bridge. He further stated: he wanted the towing vessel to get past pier 88 to allow for it not to be crushed, and to "get out" if needed. Mr. Gadow stated, in reference to the turning of the vessel into the slip: he asked for distances, which were reported as 50 meters. The master was located at the vessel controls, receiving conning orders from Mr. Gadow. Mr. Gadow stated: approximately one minute before incident, he received a distance of 15 meters, swinging clear, and the master asked to swing the stern. Mr. Gadow replied to the effect of "ok." A report was given for a 3rd time by the lookout, a distance of 15 meters, swinging clear. A radio from the lookout reported "clearing" and then immediately "not clearing," and then the vessel CARNIVAL HORIZON's top bow had hit pier 90. Mr. Gadow stated; after the allision he recalled Mr. Haley stating "what happened to the 15 meters." Mr. Gadow stated that the master of the vessel agreed.

Mr. Gadow was questioned on his knowledge in regards to the lookout station aboard the CARNIVAL HORIZON. He stated to the effect: he was aware of some persons on the bow of the vessel, at the forward most point, but he did not verify the exact locations in which the CARNIVAL HORIZON had stationed their lookouts.

Mr. Gadow stated that the towing vessel, JRT MORAN, was not "made fast" or place with a line over to the vessel. He stated that it would not be best practice to do so in the situation of docking the vessel in the tight pier. Mr. Gadow stated that there were bow thrusters, but the towing vessel was there to assist the bow. The stern propulsion was strong enough to maintain the after portion of the vessel.

Mr. Gadow was questioned to the terminology used between himself and the master, as well as himself and the towing vessel. Mr. Gadow stated: his commands were such as "bow to port," to push the bow into the current, towards port, for the CARNIVAL HORIZON master. He stated: "hook them up Tommy," was his instructions for the towing vessel to go full ahead on the towing vessel propulsion. Mr. Gadow stated: prior to the allision, the towing vessel was against the cruise ship going "easy." Mr. Gadow stated: from his position on the bridge, he did not look forward; he was looking to the back and starboard side for the towing vessel and the pier. He stated: he did not receive any other indications or warnings from persons or systems aboard the CARNIVAL HORIZON, in relation to the allision, prior to the few seconds before the allision.

Mr. Gadow stated: Mr. Haley did everything he could do to assist in the docking evolution process. Mr. Gadow stated: if he was in the same situation again, he would have started the turn back further, adjusting for the correct distances. He stated: he does not think an additional towing vessel would assist in this situation, as the stern of the cruise ship had more than enough power, and there would be no room to place a second tug forward. Mr. Gadow stated concerns over the pier size due to the addition of boarding "jet ways," located on the north side of Pier 88. He stated: the width of the pier 88 to pier 90 had been originally 380ft, but the addition had placed the distance to approximately 300 feet. Mr. Gadow stated that there was no pressure from the towing vessel or company, and that he felt enabled to raise any safety concerns. He further stated that the bow of the CARNIVAL HORIZON was shaped like a harpoon, and that looking at the bow to the pier, from the pilot house, is difficult due to the different distances, in respect to the bulbous bow.



December 3, 2018