

## **National Transportation Safety Board**

Washington, D.C. 20594 Office of Marine Safety

## Interview Summary – DCA18FM019

Interview of:	Christopher Brown, New Orleans Baton Rouge Steamship Pilots Association (NOBRA) Pilot who anchored the Nomadic Milde on May 8, 2020
Date/Time:	July 1, 2020 1000 to 1235 CDT
Location:	Telephonic/conference call
Interviewed by:	LT , USCG and Adam Tucker – NTSB
Attendee:	Mark Pivach, Mark Pivach and Matthew Pivach – Pivach, Pivach, Hufft, Thriffiley & Dunbar, LLC (attorney for NOBRA)
Accident:	DCA18FM019
May 8, 2020 Collision between Nomadic Milde and Atlantic Venus and contact between the	
<i>Nomadic Milde</i> and the Cornerstone Chemical Company dock number 2 (NTSB No. DCA20MM017). Kenner Bend, Lower Mississippi River, mile 114.5, Louisiana.	

This interview summary has been compiled based on NTSB and US Coast Guard investigator notes taken during the interview of Mr. Christopher Brown.

- Mr. Brown confirmed that he is NOBRA 31 with the New Orleans Baton Rouge Pilot Association and that he was the pilot that anchored the *Nomadic Milde* on May 8, 2020 in the Kenner Bend area. He has been a NOBRA pilot (first class pilotage) for mile marker 88.0 to 234 on the Lower Mississippi River (New Orleans to Baton Rouge). He was elected to NOBRA in 1995 and commissioned in April 1996 and has been actively piloting since then. He is commissioned as a first-class pilot with the state of Louisiana. NOBRA pilots are self-employed and are members of NOBRA. The Board of examiners for NOBRA steamship pilots is the regulator for state pilots.
- Mr. Brown said he works mostly on foreign flag vessels. NOBRA pilots rotate on a 1 week on and 1 week off basis. The State of Louisiana New Orleans Baton Rouge Steamship board of examiners is the regulator for pilots.
- Mr. Brown received orders on Friday May 8 at 1030 for the *Nomadic Milde* and had to be on board at 1330 at the Avondale shipyard. Before the call out, he was home and slept all night and said he was well rested.
- After receiving orders to the *Nomadic Milde*, he checked the weather and the river stage and looked at the general traffic conditions, noting that anchorages are first come first served.
- Mr. Brown went to the shipyard and boarded the ship, about 1320. He went to the bridge and set up a portable pilot unit (PPU) and talked with the ships master about the intended voyage and conducted a master pilot exchange. He reviewed the *Nomadic Milde's* pilot card and particulars and tested the ships whistle and rudder with the master. He also reviewed the draft and trim, spoke with the lineman and the one tugboat alongside the *Nomadic Milde* for the undocking. He recalled speaking with the master of the vessel's capabilities and that it had a conventional rudder with a controllable pitch propeller.

- On the day of the accident, Mr. Brown said he was using a trial PPU software, which NOBRA was sampling for future use. The PPU was a tablet type device and was a new piece of equipment, so it took a little longer to set it up.
- Although there was a tug standing by for the undocking they did not use it.
- There was nothing remarkable about the undocking of the *Nomadic Milde*. They proceeded about 8 miles upriver to the anchorage. There was a lot of traffic that day. The *Nomadic Milde* handled well. There were no issues with communications between him and the bridge team. He remarked that he had a good working relationship with the master and chief officer who were on the bridge with him.
- At Kenner Bend, there are two anchorages, the upper and lower anchorage. The Cornerstone Chemical dock separates the anchorages.
- There was another vessel downriver of the *Nomadic Milde* that was also destined for the Kenner bend anchorage. Mr. Brown and the pilot on that vessel communicated about the placement of each vessel at the anchorage. Mr. Brown determined the *Nomadic Milde* would go to the upper anchorage. There were three ships there and he anchored in between them. He showed the master and chief officer on the ships electronic chart and information display system (ECDIS) where they were going. The approach to the anchorage was slow as he didn't want a high rate of turn.
- The captain and chief mate were on the bridge during the anchoring of the *Nomadic Milde*. They were all close to each other and communicating well. Mr. Brown was focused out the window and looking at the radar and PPU to reference his position and speed. There were a few times where the master informed Mr. Brown that the speed was falling off.
- Ships in the anchorage always use two anchors. When he had the *Nomadic Milde* in position in the anchorage, they let go the starboard anchor to 5 shots. They then breasted to the west bank to port and let go the port anchor out to 3 shots. After that, they heaved on the starboard anchor to get a spread on the port and starboard anchor chains, so the final set was 4 shots on the starboard side and 3 on the port.
- They let go the offshore anchor first and then breasted inshore to let go the inshore (port) anchor His preference is to keep both anchors about 400 feet with about a 2 o'clock lead on the starboard chain and 10 o'clock on the port chain. The chains need to be tight to reduce any yawing. Yaw tendency is to swing to starboard.
- Mr. Brown said he remained on board the *Nomadic Milde* until the ship settled down and the captain was comfortable. He noted that things were in good shape and before departing the bridge he told the captain VHF radio channel 66 was for bridge to bridge communications and 05A for vessel traffic control (VTC). He said he told the captain that Coast Guard regulations require the engines to be on standby for short notice in the anchorage. He informed the master there would be weather and thunderstorms moving through the area that evening. After that, he boarded the crew boat and went ashore. When he departed the *Nomadic Milde*, he had absolutely no concerns about the vessel holding, nor were there any voiced from the master or chief officer.
- When asked about the time he had in mind for the engines to be on standby for short notice,
   Mr. Brown stated 10 minutes would be his expectation.
- When asked if he had any concerns with the trim of the *Nomadic Milde*, Mr. Brown remarked he had no concerns. He noticed the vessel was loaded when he was at the gangway and the

*Nomadic Milde* was about even keel. When taking the ship to the anchorage, he could feel the vessel was loaded. He could not recall if the *Nomadic Milde* was fully loaded but said he would have been informed of that on the pilot card or with the master.

- When asked about the anchorage selection, Mr. Brown stated there is adequate water where the *Nomadic Milde* was anchored. The Kenner Bend anchorage is a shallow draft anchorage. They put empty ships or ships of up to 30 feet of draft in there. He had no concerns of the selection of the anchorage for the *Nomadic Milde*. Even during low water, they still put ships at that anchorage.
- The *Nomadic Milde* was in line with the other vessels in the anchorage.
- The Kenner Bend anchorage was the best spot to put the *Nomadic Milde* as opposed to the other anchorages nearby. From there, the ship would not be in the direct current and not in the navigational channel. It was a better anchorage than Ama. The current goes down the left descending bank, and the slack water is on the right descending bank. Because of that, upbound tows run inside the anchored ships on the right descending bank because they can get out of the current.
- That anchorage was a good option, that is why there were 6 to 7 ships there. It also provides the best holding ground.
- When asked about minimum distances to other vessels, Mr. Brown said there is no requirement and that generally the upriver vessel needs more separation from the vessel in front of him. He noted that if there is 300 feet from the bow of the vessel being anchored to the stern of the vessel ahead of them, then they can drop the anchor. One ship length from the stern of an anchored vessel to the bow of an anchored vessel behind them is adequate.
- For the *Nomadic Milde*, they didn't get that close to the vessel in front of them. Mr. Brown recalled it was about 600 feet from the bow of the *Nomadic Milde* to the vessel in front of them and about 450 to the vessel aft.
- When asked who decides on the anchorage, Mr. Brown responded that the ships agent tells the pilot dispatch where the ship needs to go, and the pilot looks at what is available in that area and picks the spot. There are only a few designated anchorages, so they work with the other vessels. The designated anchorages are outlined on the electronic navigation charts (ENC).
- When asked if the *Nomadic Milde* was in the designated anchorage or not, Mr. Brown said the *Nomadic Milde* it was in line/formation with the other vessels there. Having all the ships in a line does not disrupt/complicate the flow of the traffic.
- There is a barge fleet that encroaches into the anchorage there which he thought might be an ARTCO fleet. The barge fleet goes throughout the entire anchorage with tiers of barges moored along the bank both at the upper and lower anchorage. There is activity in the barge fleets and there are northbound tows with up to 6 loads that transit through there. It is safer for everyone to be offshore which is where all the ships were that day.
- When asked if there were any changes to the locations of the designated anchorages, Mr.
   Brown said there have been no changes to that anchorage location in the 40 years he has been working in the area.
- When the port anchor of the *Nomadic Milde* was let go, Mr. Brown recalled they were at the outer limit of the anchorage. There was no significant change in the depth there. They can get sedimentation deposits on the bank due to the slower current.

- When asked if the Coast Guard was aware of the practice of anchoring outside the designated anchorage area, Mr. Brown said that all stakeholders have an interest in that area, and he is not aware of this ever being a problem. When asked if the Coast Guard has ever issued any citations related to vessels not being anchored in designated anchorages, Mr. Brown said he is not aware of any citations given. Things work there and it is customary to anchor in that area. Decisions are based on traffic density and yaw. Pilots also must factor the inshore northbound traffic that transits through there and the barge fleet traffic on the bank. Everyone is fighting for space.
- Mr. Brown explained, the spread on anchor chains will limit yaw. Without a good spread, there will be more yaw which yields greater inertia. Sometimes, in high water and strong current situations a pilot can be sent to a ship to "babysit" them while at anchor.
- Fully laden vessels are working at their limits with maximum inertia versus a vessel in ballast.
- When asked what measures can be employed to detect yaw and dragging anchor in the river,
   Mr. Brown said guard zones can be used in the ECDIS to get alerts on anchor drags or excessive yawing. This can also be done on the radar or PPU.
- When asked what equipment he was referencing when anchoring the *Nomadic Milde*, Mr. Brown said he was using the ships radar and his PPU. He noted that he doesn't use the ECDIS, because they are all different, which is why he uses the PPU.
- When asked about if COVID-19 precautions have affected pilotage operations. Mr. Brown stated no, there was no problem. Working with a mask can inhibit clear communications, especially when working on the radio. He noted the bridge team were all wearing masks.
- When asked if the PPU was plugged into the *Nomadic Milde's* AIS port, Mr. Brown confirmed it was.
- When asked when he was notified of the accident, Mr. Brown stated he was notified by phone about an hour after leaving the *Nomadic Milde* that a ship had collided with the ship astern of them.
- When asked what the river stage was at the time when he anchored the *Nomadic Milde*, Mr. Brown recalled it was about 15.5 and falling. The river was at about 16.5 feet the week prior but was slowly falling. At the time, the average river current was about 4.5 to 4.6 knots. He noted the current is point specific meaning that where the river is narrow, the current is faster, where it is wider it is less.
- When asked if the ship had any deficiencies, Mr. Brown said he did not recall being told anything. It was all good from his side.
- When asked what he said he referenced on the ECDIS with the master, Mr. Brown stated he was showing the master where he was intending to go in between the two anchored vessels, so the master could monitor his work and the bridge team knew what his plan was. When asked if the master or bridge team challenged or questioned his intended anchor location, Mr. Brown said he did not recall anything.
- Mr. Brown stated he was using the port side radar on the *Nomadic Milde*. There was an ECDIS display in the center. During the anchoring, Mr. Brown was inside the wheelhouse at that location where he could use the radar and PPU and could see the rudder angle indicator.
- When asked about the bridge team composition, Mr. Brown said there was a helmsman in addition to the master and chief officer. He didn't recall seeing a lookout. There were also crew forward on the bow which he thought was the bosun and some deck crew.

- When anchoring, they used the ships engines and there were no problems. Mr. Brown recalled, that even on dead slow ahead, the *Nomadic Milde* would still drift backwards.
- When asked if the anchorage boundaries were outlined on the electronic chart on the PPU, Mr.
   Brown said he believed they were. But, because he was using a trial software, he was not sure if the exact demarcation was the same as the chart on the PPU versus the official ENC displayed on the ECDIS.
- When asked if the master of the *Nomadic Milde* mentioned any preference for an anchorage location, Mr. Brown said he did not recall him asking anything of this.
- When asked if the bridge team were using the other radar for position reference, or distance to other vessels, Mr. Brown said he did not notice since it was out of his line of sight.
- When asked to explain how he measured the 450 feet to the vessel aft of them, Mr. Brown said he used the measuring device on the PPU.
- Mr. Brown stated there was good space to anchor the *NOMADIC MILDE* and recalled checking the position of the vessel before letting go the starboard anchor. He said had he noticed any problems with the anchor position or a problem with the proximity to another vessel, he would have taken up the anchor and re-anchored.
- When asked about the seabed holding ground in the anchorage, Mr. Brown said it comprised of mud, and he was not aware of any rocks in that area.
- When asked if wake from vessels passing by was an issue for vessels at the Kenner Bend anchorage, Mr. Brown stated that deep draft ships pass far from the Kenner Bend anchorage, so there is not much for wake generated by vessels transiting the area. The main channel is on the other side near the east bank, so the Kenner Bend anchorage, near the west bank, is far away where wake has no effect on vessels anchored there.
- When asked what river gage was referenced for river stage in the area, Mr. Brown said it was the New Orleans, Carrollton gage.
- When determining river current for the area, Mr. Brown said he uses the web site rivergages.com, as well as the Army Corps of Engineers (USACE) web site which depict the average and maximum current for specific river stages. You can also call a USACE phone number and get the stage, current and volumetric cubic flow.
- When asked about other means of determining current, Mr. Brown noted a simple means on a ship that making revolutions for 12-knots proceeding upriver but the ship is only making 9-knots, then you can estimate you are against a 3-knot current.
- When asked about the communications from the bow of the *Nomadic Milde* related to the lead of either anchor chain, Mr. Brown couldn't recall exactly. He said it is ideal for the ship to be parallel to the bank. He wants the anchors to bear the same weight and would like for the anchors to be 90 degrees relative from the bow when he lets them go.
- When asked if VTC has ever contacted a pilot to inform them they are not in the anchorage, Mr. Brown stated he has heard of it, but this has not taken place when the pilot is on the ship in the anchorage. For example, if a ship drags out of an anchorage VTC will contact NOBRA dispatch to have a pilot move a vessel back into the anchorage. Usually it is not related to whether a ship is within the prescribed limits on the navigation chart but more related to the ships being in line with each other.

- When asked what a rush pilot was, Mr. Brown stated that when a pilot gets dispatch notice for a ship, he has three hours. A rush pilot, who is on rotation, is one that is called to get to a ship as soon as he can.
- When asked, based on his experience, if there had been situations in the past where a master has taken up anchor without a pilot in order to avoid an in extremis situations, Mr. Brown could not recall a specific case. He noted, if such had occurred, a situation/accident would have likely been avoided, thus he never would have learned of it and no one would have made any deal of it. He noted that a ships master can face difficult decision if faced with a situation requiring one to get underway before a pilot can get on board.
- When asked if he heard of any violations or penalties given to masters if they were getting underway without a pilot in emergency/in extremis situations, Mr. Brown was not aware of any reprimands in this nature.
- When asked if there are NOBRA polices related to clearing distances to other vessels in an anchorage during high water, Mr. Brown stated he was not aware of such. He recalled a few years back, there was an attempt to have specific distances away from each vessel, but the Federal Pilots, responsible for working US flagged vessels, would sometimes fill in those gaps that were created amongst the other vessels, so it was discontinued because it did not accomplish what it was intended to.
- When asked if he had to go to another ship after anchoring the *Nomadic Milde*, Mr. Brown stated he did not.
- When asked if there were any river restrictions in place on the day of the accident, Mr. Brown recalled high water restrictions were in effect, but there was nothing in effect related to the time of day and the route of the *Nomadic Milde* from the shipyard to the Kenner Bend anchorage.
- When asked if he was using a radar variable range marker (VRM) to reference the distance to other vessels while maneuvering the *Nomadic Milde* to the anchorage, Mr. Brown couldn't remember exactly. His general practice is to do so. He would use a parallel index line for horizontal separation from other vessels and a VRM for longitudinal separation from vessels.
- When asked if he saw the master steer the *Nomadic Milde*, Mr. Brown stated he saw only the helmsman steer.
- When asked about utilizing the day beacons in the anchorage, Mr. Brown stated because he was going into a hole, he positioned the *Nomadic Milde* relative to the other vessels.
- When asked if ships have been known to drag anchor in the Kenner Bend anchorage, Mr. Brown said it is a good spot and there is less current there. He noted the Ama anchorage across the river has experienced problems this year. That is why they tend to have ships anchor in Kenner Bend, and the ships that are in the Ama anchorage usually have pilots on board babysitting them. During high river stages, the board of examiners requires any vessel with greater than 35 feet in draft to have a pilot on board to babysit at anchor.
- When asked, if he informed the master the option to have a pilot on board as a babysitter, Mr. Brown said he did not tell him that. He said he told him to have the engines on standby and to call the VTC if he needed any help.
- When asked if any of the other vessels in the Kenner Bend anchorage had pilots on board babysitting, Mr. Brown said he did not believe so. He also recalled there were no ships in the Ama anchorage at the time he anchored the *Nomadic Milde*.

- Mr. Brown noted that although not common, in the past when babysitting a ship at anchor, in extraordinary river conditions, they would sometimes have the ship on dead slow ahead and have the helm manned and steer a steady course.
- When asked what they do if they arrive at an anchorage that is full, Mr. Brown said that it is rare but they can go to an alternate anchorage or anchor outside of the anchorage and keep a pilot on board. Sometimes they may also go to a lay berth. With AIS, they can usually tell how busy the anchorage is before arriving there.
- When asked about NOBRA pilots on duty at the VTC as advisors, Mr. Brown said he has worked duty there, but not during the COVID pandemic. During the COVID pandemic, a designated pilot advisor no longer works physically at VTC, but is available remotely and on call to respond to any needs that arise from a remote location. When working remote, the VTC pilot advisor has a web-based system to track vessel AIS traffic in the river and a phone, unlike when a pilot advisor is physically working at the VTC facility side by side with operators since they can overhear conversations and radio communications. On the day of the accident, Mr. Brown had no contact with the NOBRA VTC pilot advisor.
- When asked of his initial intent when taking the *Nomadic Milde* to anchorage, Mr. Brown said his initial intent, since the *Nomadic Milde* was small, was to take the ship to the top of the lower Kenner Bend anchorage. When he arrived at the anchorage, that location was not a good option because it would have put him too close to the upper ship in the lower Kenner Bend anchorage. He decided on a position between two ships anchored above in the Kenner Bend anchorage which placed the *Nomadic Milde* in between two ships there; making the *Nomadic Milde* third in line with one ship astern of them.
- When asked to explain the conversation that took place with another pilot also proceeding to the anchorage on another vessel Mr. Brown replied that there was a ship down at mile 90 which also had a destination for the Kenner Bend anchorage. This conversation occurred via text messages between that vessels pilot and him. The other ship was larger, about 600-feet, than the 450-foot *Nomadic Milde* and would have fit better at the bottom of the lower Kenner Bend anchorage. The *Nomadic Milde* would fit into a hole better than the larger ship. That ship did eventually anchor at the lower end (bottom) of the Kenner Bend anchorage. He recalled the vessels name was the *Atlantic Ensenada*.
- The location of where the *Nomadic Milde* was, put them above any mandatory check/reporting requirements for New Orleans VTC.
- When asked how long he remained on the bridge of the *Nomadic Milde* after the anchors were set, Mr. Brown estimated about 10 minutes after the captain told him the anchors were set.
- When asked if there are any requirements for pilots to remain on board after setting anchors, Mr. Brown said he is not aware of any such requirements. He said the execution of placing the ship in position and setting the anchors went well and he felt pretty good that the ship was holding and in a good position when he departed the *Nomadic Milde*.
- When asked if the *Nomadic Milde* was yawing in the anchorage while he was on board, Mr. Brown said he did not observe any yawing.
- Mr. Pivach commented that based on a historical playback from a website called MRTIS (Mississippi River Traffic Information System), it looked like the *Nomadic Milde* was in a yaw at the time Mr. Brown was being picked up by a pilot boat to return to shore. Mr. Brown was asked about what he recalled of that and said that only after learning of the accident, upon looking at

the playback from MRTIS, it can be seen that *Nomadic Milde* is in a yaw at the time he is being picked up. However, at the time he departed the bridge, the vessel was not, and he cannot account for what transpired in the estimated 3 to 4 minutes to get down to the main deck to board the pilot boat. The trip back to the eastern shore was not more than a 3-minute boat ride. Mr. Brown got ashore at about 1545, and the last time he looked at his MRTIS app, his typical practice after any anchoring job, about 5 minutes later the *Nomadic Milde* still looked good.

- Mr. Brown cautioned about looking at AIS transmitting vessels when at anchor. Because they
  are at anchor and are not moving as much, their transmission interval is less than what it would
  be if a vessel was under way.
- When asked if he had noticed any yawing before he departed the *Nomadic Milde*, what he would have done, Mr. Brown said he would have remained on the bridge or returned to the bridge.
- Mr. Brown acknowledged that he did look at the historical playback of the *Nomadic Milde*, postaccident on the MRTIS web site. He was asked of his observations of the yawing of the *Nomadic Milde* after reviewing the playback, to which he commented that the yawing was abnormal.
- When asked if any other vessel contacted him, when positioning the *Nomadic Milde* at the anchorage, to advise he was too close to them or any other concerns, Mr. Brown stated no.
- When asked what he thought the current would have been at the anchorage where the *Nomadic Milde* was anchored, Mr. Brown said it would have been a minimum of 4 miles per hour to 4.5 miles per hour. Current in the river is not a constant. There can be eddies as well.
- With respect to ship depth to draft characteristics in the anchorage, Mr. Brown said the more determinant factor with the *Nomadic Milde* would have been with the under keel clearance; the depth to draft ratio.
- Mr. Brown calculated the depth to draft ratio for the *Nomadic Milde*. On the day of the accident, the river was 15.5-feet so he added that to the charted depth and then divided that sum by the draft of the ship to get a 1.6 depth to draft ratio for the *Nomadic Milde*. He noted this was more than adequate and that problems would occur at about a 1.25 depth to draft ratio. Any time you get down to a 1.25 depth to draft ratio there will be problems with interaction with the bottom. At 1.6, you would be in good shape.
- Mr. Brown noted that any time you get a depth to draft ratio of less than 2, a ship is in shallow water. Once below 1.5, you can start to get pronounced interaction with the bottom. Mr. Brown noted these calculations are based for when a ship is underway and not at anchor. For bottom interaction at anchoring in current, he hasn't seen any literature suggesting that using this ratio is problematic. It is based on the relative ratio of water under the keel. When water can flow freely and is not obstructed by the hull, any ratio less than 1.25 then causes water to go around the ship which can induce high and low pressures on the hull thus causing a ship to yaw.
- The length to breath ratio can also be a factor since there are also longitudinal stresses imposed on a vessel, but the *Nomadic Milde* was a fine line, modern vessel with a length to breadth ratio he calculated at 6.6 (length of the vessel divided by the breadth). With this ratio, it provided him with a concept of how the ship will behave. He added, this is relevant when planning a turn in a bend noting the greater the beam, the slower it will accelerate, but it will turn more readily, and will have a higher drift angle.

## End of summary