

II. Factual and Procedural Background

All material facts set forth below are undisputed unless otherwise indicated. The court primarily cites to the combined concise statement of material facts filed by the United States (ECF No. 109). Where the parties disagree about a fact or engage in argument about an alleged fact, the court will cite to the specific evidence of record to support the fact. Additional material facts may be discussed elsewhere in this opinion, in context. In determining the material facts in this case, all reasonable inferences are drawn in favor of the nonmoving party.

The accident giving rise to the present action occurred on October 16, 2015, during the navigation of MARTI's vessel, the tug M/V RYAN MICHAEL MURRAY (the "tug"), through the Lock. On that day, Mr. Beno was working with his fellow deckhands, Kelsey Johnson, Robert Silbaugh, and the pilot of the tug, Randall Schneider. The essential allegation of negligence asserted against the United States is that Jacob Chiappetta of the ACE pulled the cut of barges out of the Lock "at an excessive rate of speed" and the injury occurred "because of said excessive speed occasioned by said lockman." Second Am. Compl. ¶ 5. The relevant facts include descriptions of the operational logistics and physics involved in "locking through" a "cut of barges" through the Lock, as well as a recitation of the events on the date of the accident.

A. Locking Through the Lock

The Lock is located on the Ohio River, 32 miles downriver from Pittsburgh, Pennsylvania, near Shippingsport, Pennsylvania, and is operated for the benefit of all commercial and recreational river traffic. Def. Combined Concise Stmt. Mat. Facts ¶ 3 (ECF No. 109). On average, five to ten flotillas of tugs and barges navigate through the Lock each day. *Id.* The Lock's main lock chamber is 600 feet long. *Id.* ¶ 5. Therefore, any tugs and

barges longer than 600 feet that arrive to navigate through the Lock must be separated, or “cut”, into lengths of less than 600 feet and then proceed separately through the lock chamber. *Id.*

For an upstream navigation through the Lock, as was the case here, the tug and its tow approach the Lock with the water in the lock chamber at the downstream level and the lower gates open. *Id.* ¶ 6. The tow is moved into the lock chamber by its tug and the forward group of barges, *i.e.* the “first cut,” is moored in the chamber. *Id.* The first cut is then separated from the other barges and the tug, and will remain in the chamber to lock through. *Id.* The rear group of barges and the tug, *i.e.* the “second cut,” is then backed away and moored outside the lock, leaving the first cut without motive power in the lock chamber, referred to as an unpowered cut. *Id.* The lower gates of the lock are closed and the chamber begins to fill with water. *Id.*

After the lock chamber is filled to the upstream level, the upper gates are opened and the unpowered first cut is removed from the lock chamber using a haulage mule, a set of hydraulic winches with a wire rope which pulls a mooring kevel along a rail on the lock wall. *Id.* ¶ 7. The haulage system, therefore, is comprised of a powered operating unit, a rail line, and a kevel that travels along the rail line. *Id.*

The rail and moveable kevel are located on the Lock’s river wall attached to the top of the lock and dam guidewall. *Id.* ¶ 8. In order to pull the cut out of the lock chamber, one of the tug’s lines is run from the kevel on the Lock’s river wall to mooring hardware located on one of the barges of the first cut. *Id.* Because the track on which the haulage mule itself runs does not extend beyond the end of the lock chamber, the machinery pulls the cut only partway down the lock chamber, relying on the momentum it imparts to the cut to carry it all the way out of the lock. *Id.* ¶ 9. Once the haulage mule stops pulling the cut, the cut’s momentum begins to

dissipate slowly, and without checking the cut it could travel over 1000 feet. Pls. Other Mat. Facts at Issue, ¶¶ 14-16.

B. Checking or Slowing Down, and Stopping the Cut of Barges

The crewmembers of the tug are tasked with checking or slowing down the unpowered cut's momentum, and it is the crewman at the stern of the cut who first retrieves the tug's line from the haulage unit. Def. Combined Concise Stmt. Mat. Facts ¶ 11. Because the first cut of two cuts of barges is unpowered, it must wait upstream of the upper gates to be combined with the second cut and the tug itself. *Id.* ¶ 10. In the Lock, there is a column of vertical pins set into each wall some five feet upstream of the upper gates, where the stern of the first cut is ordinarily tied off to await the lockage of the tug and the second cut. *Id.* ¶ 10.

As the unpowered cut moves out of the lock chamber a crewman at the stern of the cut and a crewman at the bow of the cut are positioned to check the cut to slow it down and eventually stop the cut from moving altogether. Deposition of Brian Beno, Jan. 25, 2017, at 50:6-15 (ECF No. 90-3). The crewman at the stern is "primarily responsible for stopping the cut," while the crewman at the bow's job "is basically to keep the head from flying out and also assist[] in stopping" the cut. *Id.* 60:6-10. "The stern man is mainly supposed to stop the [cut]" while the "guy on the head is mainly supposed to keep that head from swinging out into the river." Deposition of Robert Silbaugh, Feb. 10, 2017, at 23-24:25; 1-2 (ECF No. 90-11).

The crewman at the stern works to stop the cut's forward movement by placing one of the tug's lines around one of the vertical pins set into the lock wall, then "checking and rendering" the line through one of the barge's deck fittings. Def. Combined Concise Stmt. Mat. Facts ¶ 12.

The crewman at the bow of the cut sometimes checks another of the tug's lock lines around hardware at that end of the cut to assist in stopping the barges. *Id.* ¶ 13.

Checking a line uses the elasticity of the line to slow and stop the cut. *Id.* ¶ 15. This is accomplished by placing the eye of the line on the barge's deck fitting, looping the line around the checkpin on or in the lock wall, taking several turns around the deck fitting, and by turns holding the line to make it stretch then allowing it to run slowly through the fitting to relieve the elastic stresses on the line. *Id.* When the line is held its elasticity absorbs momentum as it stretches and by allowing the line to run through the hardware it resets the line to stretch again. *Id.* To check properly a line the deckhand must take just enough wraps to allow him to hold the line when he must, yet still be able to give the line slack so it will move around the hardware when needed to ease the strain on the line. *Id.* ¶ 16. When a deckhand feeds the line into the hardware, *i.e.*, gives it slack, it will usually jerk. *Id.* ¶ 17. This jerking is expected and part of learning how to check a line. *Id.* A deckhand knows to be prepared for such jerks to occur. *Id.*

C. Training and Supervision Responsibilities

A tug's deckhands are trained in the checking of lines by the tug companies and their crews. Def. Combined Concise Stmt. Mat. Facts ¶ 19. The ACE does not train or supervise deckhands in the checking process. *Id.* ¶¶ 24, 25. All the lines used in the checking process are provided by the tug. *Id.* ¶ 23.

New deckhands are supervised when they check a line and only when the tug company is confident that the deckhand can safely do it himself is he asked to check a line alone. *Id.* ¶ 20. During the supervision period, deckhands learn how long to hold the line and how much slack to give it to safely take off the cut's momentum. *Id.* ¶ 21. Deckhands must learn to judge how

many wraps to take, when to hold the line, and when to let it run through the hardware in order to consistently slow the cut down. *Id.* ¶ 22. The performance of the checking task is the responsibility of the tug crew. *Id.* ¶ 25.

MARTI publishes “Safe Work Instructions” for its crews describing the checking process and trained all its deckhands to check lines. *Id.* ¶ 26-27. After Mr. Beno hurt himself on October 16, 2015, MARTI investigated the accident and provided further training to its deckhands on the lessons learned from Mr. Beno’s injury. *Id.* ¶ 28.

D. Mr. Beno’s Experience and Expertise in Checking Lines

Mr. Beno began working on the rivers in 2000 and worked as a deckhand, steersman, and leadman through October 2015. *Id.* ¶ 29. He was supervised and mentored in the checking procedure by a more experienced deckhand for six months. *Id.* ¶ 31. Mr. Beno checked a line for the first time in the first week he worked on a tug, and by the date of the accident, October 16, 2015, he had checked lines to stop cuts of barges over 500 times. *Id.* ¶¶ 30, 32. He had performed the checking procedure up to a maximum of 23 times in a week, for 15 years. *Id.* ¶ 32. As a senior deckhand, Mr. Beno also trained the men working with him in checking lines. *Id.* ¶ 33.

E. Operation and Speed of the Haulage Mule

The haulage mule at the Lock is powered by electro-hydraulic winches and moves at a slow pace. *Id.* ¶ 34. At the request of counsel, ACE employee Jacob Chiappetta timed the speed of the haulage mule running at its maximum speed for the entire length of its track – a “full pull” – while it was not attached to any vessel or other equipment. *Id.* ¶ 37. Mr. Chiappetta reported that the speed of the unloaded haulage mule moving upriver was 1.36 mph. *Id.* ¶¶ 38-39. The

parties agree that when the haulage unit is operating at its maximum speed and pulling a load, the maximum speed will be much slower than 1.36 mph. *Id.* ¶ 39. There is no dispute that the estimated maximum speed of the machinery pulling a cut of barges is roughly half as fast as the speed of the unloaded machinery, approximately 0.70 mph. *Id.* ¶ 40.

When the ACE personnel operate the haulage mule to pull an unpowered cut of barges from the lock chamber, they start the pull slowly to take the slack out of the line, but as soon as the machinery begins to pull the cut, they uniformly operate the machinery at its maximum speed. *Id.* ¶ 44. The kevel on the haulage mule, and therefore the cut of barges being pulled by the machinery, consistently moves through the lock chamber at the same speed whenever an unpowered first cut of barges is pulled from the main chamber of the Lock. *Id.* ¶ 45.

To describe the maximum speed of the unloaded haulage, the United States' expert, Arthur M. Reed, Ph.D., used as an example the speed of an airport moving walkway. *Id.* ¶ 41. Those walkways have a design speed of 100 feet per minute, which is slightly more than 1.0 mph. *Id.* ¶ 42. Dr. Reed measured the speed of the moving walkway at the Pittsburgh, Pennsylvania, airport to be 1.41 mph. *Id.* The parties agree that the maximum speed of 1.36 mph of an unloaded haulage mule is approximately that of an airport moving walkway, and that when pulling a cut of barges, the machinery moves slower than that kind of walkway. *Id.* ¶¶ 42-43. The parties also agree that during the lock through of the first cut on October 16, 2015, the haulage mule moved more slowly than a person normally walks and a person would have to try very hard to move as slowly as the mule did. *Id.* ¶ 35. Specifically, the parties agree that the speed of the haulage mule as it pulled the first cut was approximately 0.70 mph. *Id.* ¶ 40.

F. Momentum and the Physics of the Haulage Process

The pertinent physical attribute of the system of a haulage machinery pulling a cut of barges is its momentum, *i.e.*, the measure of the energy that must be dissipated to stop the cut. *Id.* ¶ 46. Momentum is the mass of an object times its velocity. *Id.* ¶ 47.

The haulage mule accelerates the cut of barges to its maximum speed and remains at a constant speed throughout the length of the pull. *Id.* ¶ 46. Therefore, the velocity to be measured to determine momentum remains the same throughout the length of the pull of the cut. *Id.* Likewise, the other variable to determine momentum, the mass of the cut of barges, typically remains the same throughout the pull of the cut. *Id.* ¶ 48. Therefore, the momentum of the cut of barges being pulled through the lock chamber remains constant. *Id.* Significantly, the momentum of the cut of barges at the moment it is removed from the haulage mule is the same whether the cut is released from the mule partway down the rail (a partial pull), or at the end of the rail (a full pull). *Id.* ¶ 51. For example, if the haulage mule pulls the cut halfway down the rail and then releases it, the momentum of the cut will be $M1$. If the cut is pulled to the end of the rail and then released, its momentum will also be $M1$.

Once the cut of barges is no longer being pulled by the haulage mule, the momentum of the unpowered cut of barges begins to dissipate as it moves through the water. *Pls. Other Mat. Facts at Issue* ¶ 14. Environmental factors such as wind, eddies created by the different gross weights of the barges, and the effects of the river's currents can, at times, work to decelerate a cut of barges once the haulage machinery is stopped. *Def. Combined Concise Stmt. Mat. Facts* ¶ 50. If there is no significant current in the river or wind and no effect from eddies, these environmental factors have minimal effect, and, absent the checking process by crewmembers, a

barge could travel over 1000 feet on its own power. *Id.* ¶ 51; Pls. Other Mat. Facts at Issue ¶ 14. Stronger forces created by these environmental factors, however, may require the operation of the haulage mule through its entire length—a “full pull”—to maintain enough momentum in the system to ensure the cut fully exits the lock chamber. Def. Combined Concise Stmt. Mat. Facts ¶ 52.

G. Locking Through the First Cut on October 16, 2015

ACE employees Mr. Chiappetta and Mike Susnjer worked the Lock on the afternoon of October 16, 2015, when the Tug locked through bound upriver. Def. Combined Concise Stmt. Mat. Facts ¶ 53. Mr. Chiappetta recalls that there was a third ACE lockman who usually worked with Mr. Susnjer and him, but he was not present on October 16, 2015, due to an injury. *Id.* ¶ 55. Mr. Chiappetta operated the fill valves, gates, and haulage mule, while Mr. Susnjer walked the land wall above the deckhand at the stern of the first cut. *Id.* ¶ 56. Neither Mr. Chiappetta nor Mr. Susnjer remember anything about the lockage on October 16, 2015, which was to them a routine event. *Id.* ¶ 54.

On October 16, 2015, the Tug approached the Lock at 12:40 p.m., but had to wait its turn because the Lock was occupied with another lockage. *Id.* ¶ 57. At 3:00 p.m., the Lock was ready for the Tug and the Tug pushed its tow up to the Lock and began its lockage. *Id.* ¶ 58. The first cut pushed into the lock chamber, with its bow over the downstream sill, at 3:30 p.m. *Id.* The tow was broken, or cut, by 3:45 p.m., and then the Tug backed out with the second cut and moored. *Id.* The Lock’s lower gates were closed and the lock chamber was filled to the upstream level in preparation for locking through the chamber. *Id.*

Mr. Chiappetta went to the control panel on the lock wall to operate the haulage unit. *Id.* ¶ 59. Mr. Beno was located at the bow of the first cut, while his fellow crewman, Kelsey Johnson remained at its stern. *Id.* Mr. Johnson had worked with Mr. Beno as his stern man for about three years. Pls. Other Mat. Facts at Issue ¶ 3. Deckhand Robert Silbaugh, a MARTI employee, climbed from the second cut to the Lock's land wall to tend lines. Defs. Combined Concise Stmt. Mat. Facts ¶ 59. Mr. Silbaugh walked the wall above Mr. Beno at the bow of the cut and Mr. Susnjer walked the wall above Mr. Johnson at the stern of the cut. *Id.*

As the lock chamber finished filling, Mr. Johnson provided one of the tug's lines to Mr. Chiappetta on the lock wall, who placed it on the kevel of the haulage mule, ready to pull the first cut out of the lock chamber. *Id.* ¶ 60. When the lock chamber was filled to the upstream level, Mr. Chiappetta opened the upstream gates and blew the Lock's horn to indicate that the removal of the first cut from the lock chamber was beginning at 4:14 p.m. *Id.* ¶ 61. Mr. Johnson took off the mooring line that was holding the stern of the cut in place in the lock chamber. *Id.*

When Mr. Chiappetta stopped the haulage unit, the cut's momentum made the line on the haulage mule go slack. Def. Combined Concise Stmt. Mat. Facts ¶ 65. Mr. Johnson, from the stern of the cut, jiggled the line to shake its eye off the haulage mule's kevel, and then pulled that line to the deck of the cut. *Id.* Mr. Johnson walked across the stern of the cut to prepare to catch a pin at the stern of the cut and check the cut to a stop. *Id.* ¶ 66. As he did this, he was relating to Mr. Beno the distances between the stern of the cut and the pin Mr. Johnson would catch outside the lock chamber. *Id.* Mr. Johnson would call out to Mr. Beno, "30 feet" to indicate to him to start checking down. Pls. Other Mat. Facts at Issue ¶ 37.

As the stern of the first cut exited the lock chamber, Mr. Silbaugh dropped a “handy line” with a hook on it to Mr. Beno in order to pull the eye of one of the tug’s lock lines up and walk with it along the lock wall. *Id.* ¶ 68. Mr. Silbaugh placed another line on the “rabbit,” a smaller, unpowered piece of hardware on a rail on the lock wall outside the chamber, that served to keep the bow of the cut from pulling away from the lock wall. *Id.* When the cut reached a proper place to check it to a stop, Mr. Johnson threw one of the tug’s lines to Mr. Susnjer, located on the lock wall, who put the line on a pin atop the wall. *Id.* ¶ 69. Mr. Johnson checked the line to stop the cut without any further assistance from the Mr. Susnjer. *Id.* While there was a lot of momentum on the barges and the cut traveled 50 or 60 feet longer than usual as he checked his line, Mr. Johnson stopped the cut by checking a line at its stern. *Id.* ¶ 70.

At the bow of the cut, Mr. Beno told Mr. Silbaugh to drop the eye of the lock line he carried onto an appropriate timberhead atop the lock wall, upstream of the gate, meaning at a point beyond the lock chamber. *Id.* ¶ 71. Mr. Beno ran the other end of the line through a kevel on the bow of the cut and began checking it to assist Mr. Johnson in stopping the cut. *Id.* Mr. Beno checked the line through the kevel for 30 feet, standing five to six feet from the kevel as he began. *Id.* ¶ 72. As he checked the line, Mr. Beno backed away eight to ten feet from the kevel as he held the line in his right hand and judged when to let it run and when to hold it. *Id.* ¶ 73. As he did so, Mr. Beno’s arm was yanked forward as the line moved through the kevel, injuring his shoulder. *Id.*

After the cut was stopped, Mr. Beno and Mr. Silbaugh reset the line which Mr. Beno had been checking to give it a “down river lead” and prevent the cut’s drifting back into the lock chamber. *Id.* ¶ 74. Mr. Beno walked to the stern of the first cut, and the gates at the upriver end

of the lock chamber closed behind the first cut. *Id.* ¶ 75. Mr. Beno and Mr. Johnson were unable to depart from the cut; they could not access the ladder on the lock wall because the cut came to a stop about 40 or 50 feet past the ladder. *Pls. Other Mat. Facts at Issue* ¶¶ 70-71. They remained on the first cut while the second cut and tug locked through the chamber and were able to assist in rewiring the two cuts together. *Def. Combined Concise Stmt. Mat. Facts.* ¶ 77. Mr. Silbaugh walked back to assist in locking through the second cut, which began at 4:25 p.m., with the entire double lockage being completed at 5:28 p.m. *Id.* ¶¶ 76-77. Neither Mr. Beno nor any MARTI employee complained to any ACE personnel or notified the ACE about Mr. Beno’s injury on October 16, 2015. *Id.* ¶ 77.

H. The Length of the Pull

The parties dispute whether there was a full pull or partial pull.¹ Mr. Johnson testified that the haulage mule was operated to the end of its rail; that is, a full cut. *Def. Combined Concise Stmt. Mat. Facts* ¶ 63. A full pull means that the haulage mule stops 50 feet short of the end of the lock chamber gates. *Pls. Other Mat. Facts at Issue* ¶ 80. In addition, Mr. Beno points to the high “speed” at which the unpowered cut of barges traveled during the checking and slowing process as well as his injury to support a finding that a full pull occurred.

The United States offers circumstantial evidence in support of a finding that a partial pull occurred, which primarily consists of Mr. Chiappetta’s testimony that he believes he would have performed a partial pull in light of the known conditions existing on the date of the incident.

¹ The United States appears to agree that it was a full pull asserting that “the mule pulled the cut the full length of its track;” this statement, however, occurs as a preface to the primary contention that Mr. Johnson was able to perform his checking and stopping duties with no trouble. *Def. Combined Concise Stmt. Mat. Facts* ¶ 36. In contrast, throughout the United States’ summary judgment pleadings, it presents circumstantial evidence in support of a finding that a partial pull was performed. Therefore, the court views this matter as a disputed fact.

Def. Combined Concise Stmt. Mat. Facts ¶¶ 60, 62. In addition, Dr. Reed agreed that given the evidence he had reviewed, as well as the known conditions on October 16, 2015, a full pull was not warranted. Reed Dep. 18:5-16. Mr. Chiappetta, however, has no memory of what he actually did on October 16, 2015, and admits that it is possible that he did perform a full pull. Def. Combined Concise Stmt. Mat. Facts ¶ 54.

Given the conflicting testimony, it must be left to a factfinder to determine whether it was a full or partial pull.² The parties also dispute the effect the length of the “pull” has on the deckhands’ task of checking and stopping the cut to dissipate the momentum. The United States maintains that since the momentum remains the same throughout the length of any pull, the length of the pull has minimal effect on the task of checking and stopping the cut. *Id.* at 49. The United States maintains it is not a material fact whether it was a full pull or partial pull, arguing that summary judgment is appropriate even if it was full pull. Plaintiff maintains that the length of the pull in this case was not warranted by the conditions and in fact it made the deckhands’ task of checking and stopping the cut more difficult. Pls. Other Mat. Facts at Issue ¶¶ 18, 52, 54, 55, 75-76, 82 (ECF No. 106). Viewing the evidence in favor of Plaintiff, the nonmoving party, the court concludes the evidence is sufficient to support a finding that a full pull occurred in this case.

² Plaintiff’s pleadings include numerous allegations that the ACE employees, and in particular, Mr. Chiappetta, were upset that the Tug entered the lock chamber slower than normal, that an ACE employee (presumably Mr. Chiappetta) implied that the crew of the first cut was going to be pulled faster than expected, and that several of Plaintiff’s coworkers believed that the lock through was unusual and traveled faster than normal. These allegations concern issues of credibility for a factfinder and are not necessary for resolution of the instant motion for summary judgment.

I. Procedural Background

Plaintiff filed his initial complaint on July 7, 2016, followed by a first amended complaint on October 3, 2016. ECF Nos. 1 & 15. The second amended complaint (ECF No. 38) was filed after the court dismissed Plaintiff's vicarious liability claim against MARTI with prejudice, and his direct negligence claim against MARTI without prejudice. Oral Order, Court Text Minute Entry, Dec. 9, 2016, granting MARTI's Motion to Dismiss (ECF No. 19). The only remaining claim is Plaintiff's claim against the United States because pursuant to the parties' Joint Stipulation filed on March 14, 2018, MARTI was dismissed from this case. ECF No. 87. The parties also stipulated that a) Plaintiff's claims for Jones Act Negligence and Maintenance and Cure were dismissed with prejudice; b) MARTI's cross-claim against the United States for common law indemnification and contribution was withdrawn; and c) Plaintiff reserved his right to appeal the court's dismissal of his vicarious liability claim against MARTI. *Id.*

On April 16, 2018, the United States filed a motion for summary judgment (ECF No. 90), a brief in support of its motion, (ECF No. 92), a concise statement of material facts (ECF No. 91), and supporting exhibits (ECF Nos. 90-3 to 90-15). In response to the motion, Plaintiff filed a brief in opposition (ECF No. 105), a response to the United States' concise statement of material of facts (ECF No. 106), and supporting exhibits (ECF Nos. 106-1 to 106-6). The United States filed a reply brief (ECF No. 107), a reply to Plaintiff's response to the concise statement of facts (ECF No. 108), and supporting exhibits (ECF Nos. 108-1 to 108-6). In addition, the United States filed a Combined Concise Statement of Material Facts combining both parties' statements of facts with their respective replies. ECF No. 109.

III. Standard of Review

Summary judgment may only be granted where the moving party shows that there is no genuine dispute about any material fact, and that judgment as a matter of law is warranted. Fed. R. Civ. P. 56(a). Pursuant to Federal Rule of Civil Procedure 56, the court must enter summary judgment against a party who fails to make a showing sufficient to establish an element essential to his or her case, and on which he or she will bear the burden of proof at trial. Celotex Corp. v. Catrett, 477 U.S. 317, 322 (1986). In evaluating the evidence, the court must interpret the facts in the light most favorable to the nonmoving party, drawing all reasonable inferences in his or her favor. Watson v. Abington Twp., 478 F.3d 144, 147 (3d Cir. 2007).

In ruling on a motion for summary judgment, the court's function is not to weigh the evidence, make credibility determinations or to determine the truth of the matter, but only to determine whether the evidence of record is such that a reasonable jury could return a verdict for the nonmoving party. Reeves v. Sanderson Plumbing Prods., Inc., 530 U.S. 133, 150–51 (2000) (citing decisions); Anderson v. Liberty Lobby, 477 U.S. 242, 248–49 (1986); Simpson v. Kay Jewelers, Div. of Sterling, Inc., 142 F.3d 639, 643 n. 3 (3d Cir. 1998). The mere existence of a factual dispute, however, will not necessarily defeat a motion for summary judgment. Only a dispute over a material fact—that is, a fact that would affect the outcome of the suit under the governing substantive law—will preclude the entry of summary judgment. Liberty Lobby, 477 U.S. at 248.

IV. Discussion

This action is brought pursuant to the SIAA, which “permits suits in admiralty against the United States “in cases where . . . if a private person or property were involved, a proceeding in admiralty could be maintained” That is, it renders the United States liable to suit to the same extent that a private person would be liable.” Wiseman v. United States, No. 3:10-CV-111-RLY-WGH, 2012 WL 1252596, at *2 (S.D. Ind. Apr. 13, 2012) (quoting Pearce v. United States, 261 F.3d 643, 647 (6th Cir.2001) (other citation omitted)). The United States seeks summary judgment on Plaintiff’s negligence claim. “A negligence action under the SIAA consists of the following elements: (1) the existence of a duty of care owed by the defendant to the plaintiff; (2) a breach of that duty; (3) proximate causation; and (4) actual loss, injury, or damage.” Wiseman, 2012 WL 1252596, at *2.

Plaintiff claims that the United States has a duty of reasonable care in operating the lock and that it breached that duty when Mr. Chiappetta negligently performed a full pull resulting in excessive momentum that caused the injury. The United States argues that: a) a full pull is not negligence; b) the momentum that occurred was limited by the speed of the haulage mule and was the expected momentum for the mass of the cut of barges; and c) the injury was caused by Mr. Beno or by MARTI’s lack of appropriate training of Mr. Beno.

A. Duty of Care Owed to Plaintiff

“[O]nce the government does undertake to supply a service, then it must be held responsible for negligent acts in supplying the service.” Wiggins v. U.S. Through Dep't of Army, 799 F.2d 962, 966 (5th Cir. 1986). The operation of the Lock by the ACE, an agent of the United States, establishes that the United States had a duty of reasonable care owed to ships

passing through the locks. Contango Operators, Inc. v. Weeks Marine, Inc., 613 F. App'x 281, 287 (5th Cir. 2015) (the ACE “has a duty of reasonable care under general maritime law”); Canadian Pac. (Bermuda) Ltd. v. United States, 534 F.2d 1165, 1168 (5th Cir. 1976) (SIAA equates standard of duty owed by Government to that of a private person; held to require the use of due care); Beeler v. United States, 256 F. Supp. 771, 776 (W.D. Pa. 1966) (SIAA “casts upon the United States the same duty of care that private persons have”).

In its initial brief, the United States argued that the ACE had no duty to train, assist, or supervise tug crews with respect to checking or stopping the cut of barges. Def. Mem. Supp. 5-6 (ECF No. 92). Plaintiff implicitly concedes this point by not addressing it in his brief, primarily because Plaintiff’s allegation of negligence concerns the conduct of the ACE in pulling the cut of barges through the lock. Plaintiff’s claim is that the United States breached its duty of reasonable care when its employee performed a full pull causing the cut of barges to lock through at an “excessive rate of speed” at the point the checking process began, which caused Mr. Beno’s injury. Second Am. Compl. ¶ 5. Although Plaintiff used the term “rate of speed” in his complaint it is clear that the critical concept is in fact “momentum,” which is defined as the mass of an object times its velocity.

B. Momentum of the Cut of Barges and the Speed of the Haulage Mule

There is no dispute that the haulage mule was operated at a slow, constant, maximum speed. In addition, there is no dispute that the momentum imparted to the cut of barges at the point when the haulage mule released the cut after pulling it through the lock is virtually the same momentum whether it is a partial pull or full pull. The point of contention is whether there is a meaningful difference in the momentum at the point when checking the cut of barges begins.

With these considerations in mind the undisputed physics of momentum in this case are discussed.

1. Mass

The measure of momentum is the mass of an object times its velocity. In this case, the object is the cut of barges. The parties agree that the mass of the first cut of barges at issue was significant. With at least four loaded barges of coal each weighing approximately 5000 tons and five empty barges, the cut's mass was in excess of 20,000 tons. Pls. Other Mat. Facts at Issue, ¶ 4; Chiappetta Dep. 5:15-18; 69:25 to 70:1-7; 82:22-25.

2. Velocity

The United States set forth undisputed evidence to show that the haulage mule operates at a maximum speed no greater than 1.36 mph when it is not pulling any weight, and that when it is pulling a loaded cut of barges, the speed is approximately half, or 0.70 mph. Thus, the speed of the haulage mule pulling the first cut of barges in this case was described as being less than the speed of a moving walkway at an airport.

3. Momentum

The momentum of the cut of barges is the product of the massive weight of the cut of barges multiplied by the speed at which the cut is being pulled. Thus, the momentum at issue is greater than the slow speed of the haulage mule. Plaintiff does not dispute that the United States is employing the definition of momentum properly, and therefore must concede that the momentum of the cut of barges when released from the haulage mule would have been virtually the same whether it was a partial pull or full pull. Accordingly, Plaintiff's statements of fact that the "longer the pull, the more momentum on the barge," and the "father the pull, the more

momentum on the barge as it is coming out of the lock,” and “the longer the pull the more the momentum,” cannot be correct insofar as the term “momentum” refers to the scientific equation of mass times velocity. Pls. Concise Stmt. Mat. Facts, ¶¶ 21, 22, & 23. Thus, the United States avers correctly that the momentum imparted to the cut of barges *at the point of release* from the haulage mule is the same whether it is a partial pull or full pull. Plaintiff’s argument, however, focuses on the momentum *at the point that the crewmembers started checking* the cut of barges.

C. Whether a Genuine Dispute of Material Fact Exists

The United States argues that judgment as a matter of law in its favor is warranted even assuming there was a full pull. It points out that: a) there are times when a full pull is necessary and therefore a full pull is not in and of itself evidence of negligence; b) because competent crewmembers are responsible for safely checking and stopping a cut of barges regardless whether it is a partial pull or full pull, the length of the pull does not matter; and c) the evidence of record is sufficient to establish that regardless of the length of the pull, there is a negligible difference in the momentum of a cut of barges at the point when the checking process begins and the momentum of the cut would not have affected the crewmembers’ ability to check and stop the barge. The United States contends that if on October 16, 2015, the momentum of the cut of barges actually experienced by the crewmembers was greater than *expected* -- causing them to expend more effort to check and stop the cut -- the greater momentum was due to the mass of the cut of barges, not the length over which the haulage mule pulled the cut. Therefore, the United States argues that the injury that occurred to Mr. Beno is due either to the negligence of the crewmembers or the failure of MARTI to train adequately the crewmembers.

In response, Plaintiff argues that the momentum at the point when the checking process began *was* significantly greater due to the unexpected and uncalled for full pull. The greater momentum made the checking process more difficult and less safe, which resulted in Mr. Beno's injury.

Mr. Chiappetta testified that he would perform a full pull after considering several factors: the amount of dam opening, wind, water level and current, the number of loaded barges and empty barges, where the empty barges are located on the cut, and whether there is a box end or rake end on the front of the cut of barges. Chiappetta Dep. 24:1-9, 24-25 to 25:1-11. Because Mr. Chiappetta had no recollection of the lock through of the Tug or of the events on the day of October 16, 2015, *id.* 12:5-6; 50:4; 74:22-24; 75: 1-4; 79:1-9, he was provided with the known relevant factors existing on October 16, 2015. Those factors were: a) the makeup of the cut of barges (number of loaded and unloaded barges); b) the amount of the dam opening (which indicated the current was low flowing); c) stagnant water; and d) zero precipitation. *Id.* 25:12-25 to 26:1-11. Based on these factors, Mr. Chiappetta stated that he would not have given a full pull on October 16, 2015. *Id.*

Mr. Chiappetta stated that based on the weather that was reported and the make-up of the cut, he likely performed a partial pull, stopping the kevel some 250 feet short of the end of the rail. Def. Combined Concise Stmt. Mat. Facts, ¶ 62. He stated more specifically that based *only* on the weather report and the fact that there was no current, he would not have performed a full pull. Pls. Other Mat. Facts at Issue, ¶ 60; Chiappetta Dep. 25:12-25 to 26:1-7. He also testified that based solely on the cut of barges having some barges loaded with coal and some empties, he would not have given a full pull, explaining that the presence of some loaded barges is “enough

to tell me that it wasn't a full pull, but it could be possible." Chiappetta Dep. 82:18-20 and 82:21- 25 to 83:1. Mr. Chiappetta agreed that depending on conditions existing on October 16, 2015, but not available to him at his deposition, such as wind or sluggishness of the cut, it is possible he would have had to give the cut of barges a full pull. *Id.* 79:19-25. He could not state with certainty that he gave a partial pull, and it is possible that he gave a full pull, *id.* 80:5-10, which would be in accord with Mr. Johnson's testimony that the haulage mule ran to the end of the rail.

Mr. Chiappetta offered detail describing the partial pull he believes he would have given, as well as why he does a partial pull as opposed to a full pull. First, he explained a partial pull as follows:

[o]nce the head of the last barge reached the miter blocks of the gate, 250 feet short of the [lock] chamber, that's when I would have stopped pulling [the cut]. That's when I would have turned the machine off, and he would have unhooked his line, and they would free float until they were ready to start checking their barges down.

Chiappetta Dep. 26:14-20. He explained why he does a partial pull, as follows:

A. . . . I don't want to make the deck hands work harder than what they have to. So if I can stop them short and do them a little bit of a favor I will.

Q. You mean they would have to work harder to stop it if it's too fast?

A. Right. I don't know if you've seen a barge line snap, but it sounds like a shotgun going off and it can knock a deck hand out of his boots, I don't want to see that.

Q. Someone can get hurt?

Q. So in this type of grouping of barges the prudent or safe way or spot to stop the mule would have been approximately 250 feet short of the gate?

A. Right.

Id. 30:1-10, 18-21. Mr. Chiappetta described a circumstance in which it is easier to stop a cut with loaded barges after a partial pull. He explained that with loaded barges, as in this case, if

the cut is stopped 200 or 250 feet short of the end of the chamber, the cut will “start slowing down on its own” due to the weight of the barges (whereas as a cut of empty barges would “pick up speed”) “and you could probably stop the cut with a shoe string.” *Id.* 29: 5-17.

Mr. Chiappetta testified that based on the conditions on October 16, 2015, and the makeup of the cut of barges, a partial pull -- 250 short of the gate -- was all that was required. Dr. Reed agreed. Viewing the evidence in a light most favorable to the nonmoving party, a reasonable factfinder could conclude that the conditions on October 16, 2015, called for a partial pull and none of the crew members on the first cut of barges would be expecting a full pull.

Mr. Chiappetta described a partial pull as safe and prudent and that such a partial pull would not increase the difficulty for the crewmembers tasked with checking the cut of barges. Mr. Chiappetta testified that when operating the haulage mule, he takes into consideration the difficulty of the checking and stopping process on the crew members, noting that stopping a cut of barges after a partial pull is easier. He described the decrease in momentum after a cut travels 200 to 250 feet to be slow enough that the cut “could probably stop the cut with a shoe string.” Chiappetta Dep. 29:8-9. He agreed that a partial pull was the prudent or safe method with a cut of barges such as in this case. *Id.* 30:19-21. A factfinder therefore could conclude that the difference in momentum at the point at which the crewmembers begin checking a cut of barges after a full pull is significantly greater than with a partial pull.

After a full pull the momentum of the cut must be brought to a stop over a shorter distance. Consequently, it is possible that if the crewmembers expected a partial pull, but a full pull occurred, they would not have been adequately prepared to engage more quickly in a strenuous checking procedure, even though it is a procedure they were trained to handle. A

factfinder may therefore conclude that it was foreseeable to Mr. Chiappetta that neither Mr. Beno nor Mr. Johnson would be expecting a full pull, and that for him to perform a full pull was negligent.

Viewing the evidence in a light most favorable to the nonmoving party, a reasonable factfinder could conclude, a) that a partial pull was all that was required on October 16, 2015; b) a partial pull is safer; and c) an unexpected full pull occurred. Under these circumstances a reasonable factfinder could determine that Mr. Chiappetta's conduct in performing a full pull without advance warning to the crewmembers was negligent because his conduct deprived Mr. Beno and Mr. Johnson of an opportunity to prepare for a more difficult checking and stopping process. At a minimum a warning could have allowed Mr. Beno and Mr. Johnson to confer and confirm with each other that they would have to begin the checking process soon after release from the haulage mule and at a time when momentum would not have dissipated as much as would have occurred with a partial pull.

At trial a factfinder would also be entitled to conclude that Mr. Chiappetta in fact performed a partial pull, or that Mr. Beno's injury was not the result of any negligence on the part of Mr. Chiappetta even if it was a full pull. A reasonable factfinder may consider Mr. Beno's extensive experience as a deckhand and conclude either that it is unlikely that he was injured absent unusual circumstances outside of his control, or that his experience means he should have been prepared to check and stop the cut of barges without incident. Those determinations will be for the factfinder. Accordingly, the United States motion for summary judgment will be denied.

V. Conclusion

The United States failed to establish as a matter of law that the ACE did not breach a duty owed to Plaintiff. Plaintiff presented evidence from which a factfinder could reasonably conclude that the ACE's conduct in performing a full pull was negligent under the circumstances. Whether a full pull occurred and if so whether it amounted to negligence must be presented to a factfinder. For the foregoing reasons, the United States' motion for summary judgment will be denied.

An appropriate order follows.

By the court:

/s/ Joy Flowers Conti
Joy Flowers Conti
Chief United States District Judge

Dated: September 21, 2018