

**IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF IOWA
EASTERN DIVISION**

DAKOTA, MINNESOTA & EASTERN
RAILROAD CORPORATION,

Plaintiff,

vs.

INGRAM BARGE COMPANY,

Defendant.

No. C15-1038-LTS

**MEMORANDUM OPINION
AND ORDER ON REMAND**

I. INTRODUCTION

This case is before me on remand (Doc. No. 83) from the Eighth Circuit Court of Appeals. *See Dakota, Minnesota & E. R.R. Corp. v. Ingram Barge Co.*, 918 F.3d 967, 973 (8th Cir.), *cert. denied*, 140 S. Ct. 233 (2019) (Doc. No. 83). In its opinion, the Eighth Circuit held the failure by Ingram Barge Company (Ingram) to rebut the *Oregon* presumption did not, as a matter of law, preclude a finding that Dakota, Minnesota & Eastern Railroad Corporation (DME) was comparatively negligent in causing the harm to its bridge. *Id.* at 7–8. The court determined that my post-trial ruling (Doc. No. 59) did not sufficiently reveal whether my finding that Ingram’s negligence was the sole cause of the allision was independent of my finding that Ingram failed to rebut the *Oregon* presumption. *Id.* at 8–9. Therefore, without expressing an opinion on whether DME was comparatively negligent, the court remanded the case for me to address the issue.

I conducted a post-remand status conference with counsel, during which the parties agreed that a new trial is not necessary. *See* Doc. No. 89. Instead, the parties agreed “that new briefing, based on the existing evidentiary record and the guidance provided by the Court of Appeals, is appropriate.” *Id.* at 1. The briefs have been filed and this case is now ready for decision.

II. PROCEDURAL HISTORY

DME¹ commenced this action by filing a complaint (Doc. No. 2) in admiralty in this court on December 10, 2015, alleging damages from Ingram's barge's allision with its bridge near Sabula, Iowa (Sabula bridge), on April 24, 2015. After a three-day bench trial, I issued a ruling on April 24, 2018, finding that Ingram was negligent in causing the damage to DME's Sabula bridge and awarding DME \$276,860.85 in damages. *See* Doc. No. 59. I later amended the judgment to include prejudgment interest in the amount of \$26,868.50. Doc. No. 73.

Ingram filed a notice of appeal (Doc. No. 69) on May 25, 2018. As noted above, after the court of appeals issued its opinion remanding this case, the parties agreed to submit new briefing "based on the existing evidentiary record and the guidance provided by the Court of Appeals." Doc. No. 89 at 1. They further agreed that because the issue on remand involves an affirmative defense, the defendant should file the opening brief. *Id.* Ingram filed its opening brief (Doc. No. 91) on August 15, 2019. DME filed its opening brief (Doc. No. 92) on September 16, 2019. Ingram filed a reply (Doc. No. 93) on October 4, 2019, and DME filed a sur-reply (Doc. No. 96) on October 7, 2019.

III. FINDINGS OF FACT

While the parties have agreed that I should rule based on the existing evidentiary record, I find it helpful to restate my prior findings of fact. Except for some changes to footnote numbers, these are repeated verbatim from my initial ruling (Doc. No. 59).

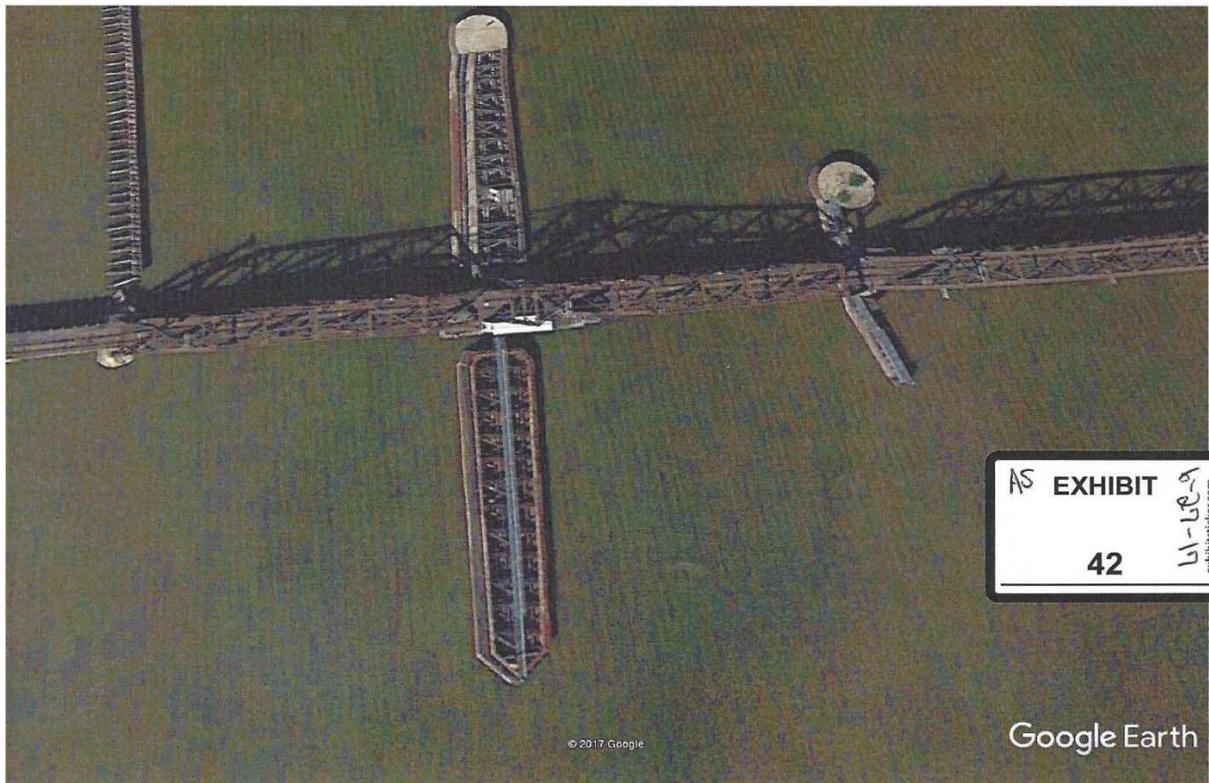
A. The Bridge

As of April 24, 2015, DME owned the Sabula Bridge (the Bridge) and its related structures. The Bridge is a railroad bridge that crosses the Upper Mississippi River near

¹ The complaint included a second plaintiff and made allegations concerning a separate allision that occurred on September 7, 2015. However, on January 27, 2016, the parties filed a stipulation (Doc. No. 15) of dismissal concerning the September 7, 2015, allision.

Sabula, Iowa, and Savanna, Illinois. Ingram is in the business of transporting barges on the Upper Mississippi River and elsewhere.

The Bridge dates back to 1880, when its construction was authorized by the Secretary of War. To allow river traffic to pass through the Bridge, a pin-connected swing span rotates 90 degrees. An overhead photograph of the bridge in its closed position is reproduced below:



See Ex. 52.² This photograph is oriented with north at the top. The railroad tracks thus cross over the Bridge in an east-west direction. The piers that extend north and south of the bridge are protection piers that protect the swing span from being impacted by river traffic while the span is in the open position. When the span is open for river traffic, it rests directly above the protection piers.

² The “Exhibit 42” label on the photo is a deposition exhibit sticker.

When the swing span is open, it creates two channels for river traffic. Typically, northbound river traffic uses the east (Illinois-side) channel, while southbound river traffic uses the west (Iowa-side) channel. The east channel is approximately 154 feet wide, while the Mississippi River's shipping channel is 300 feet wide.

The average tow using the Upper Mississippi River consists of 15 barges, powered by a 3200 to 4800 horsepower towboat. Barges in tows are typically arranged five long and three wide, with each barge being approximately 195 feet long by 35 feet wide. Thus, the width of three barges, when arranged side-by-side, is approximately 105 feet. With the Bridge's east channel being 154 feet wide, this leaves under 25 feet of clearance on each side.

On June 17, 1996, the United States Coast Guard issued an Order to Alter the Bridge pursuant to the Truman-Hobbs Act, 33 U.S.C. §§ 511 *et seq.* Ex. EE at 2. The Order to Alter declared the Bridge to be an “unreasonable obstruction to the free navigation of the Upper Mississippi River” and directed the then-owner to reconstruct the Bridge to meet various requirements. *Id.* Among other things, the Order to Alter directed that the Bridge provide a horizontal clearance of at least 300 feet. *Id.* The legal effect and relevance of the Order to Alter will be addressed later in this ruling. It is undisputed that neither DME nor any prior owner of the Bridge took any action to reconstruct the Bridge after the Order to Alter was issued.

B. The Allision

In the early morning hours of April 24, 2015, Ingram was operating the M/V Aubrey B Harwell Jr (the Harwell) while pushing nine empty barges upstream, approaching the Bridge from the south. The barges were configured three barges long and three barges wide. Thus, the length of the tow without regard to the Harwell was approximately 585 feet and the width was approximately 105 feet. The Harwell was centered aft of the barges as it pushed them upstream. The barges were secured to each other and to the Harwell with standard cabling, which did not fail.

As the Harwell began pushing its tow through the east channel, one or more of the barges struck the Bridge's south protection pier, causing damage to that structure. In addition, a metal grease platform that hung below the south tip of the swing span (as the span was oriented in the open position) also incurred damage. The Harwell then completed its passage through the Bridge channel and continued its upstream course.

Many witnesses testified (either live or via deposition) about the manner in which this incident occurred. The material details are largely undisputed. I find the testimony of Hershey Dampier, who was steering the Harwell at the time of the allision, to be particularly instructive about the incident. Dampier explained that he began working for Ingram in 1999, as a green deckhand. Over the next 12 years, he progressed through various positions including experienced deckhand, senior deckhand, leadman, second mate, first mate and senior mate, which he described as being the highest rank on deck.

In April 2015, Dampier obtained a steersman's license from the United States Coast Guard. The application process for obtaining this license involved training at river school and a test, which Dampier passed. He explained that a steersman is an apprentice position in which he could steer a vessel while under the pilot's supervision.

On April 24, 2015, Dampier was on his first trip as a licensed steersman and was steering the Harwell under the direction of Tommy Hinton, the Harwell's pilot. The trip had been in progress for somewhere between 10 and 14 days by that time, with Dampier steering at all times while he was on duty. Dampier was familiar with the Bridge, as he had passed through it many times as a deckhand for Ingram. Among other roles, he had sometimes served as a lookout deckhand, posted at the front of the tow and radioing information to the pilot about distance, width, etc. Dampier testified that lookouts are always posted when passing through a bridge.

Dampier testified that Hinton was in the wheelhouse with him during the relevant events and that the two of them discussed the procedures for passing through the Bridge while the Harwell was still about a mile south of the Bridge. Hinton told him that because of the wind, and the small size of the tow (9 barges instead of 15), he should keep the

barges pointed to the shore pier on the right, or Illinois, side of the northbound channel. Hinton asked Dampier if he was comfortable steering through the bridge and Dampier said that he was.

Dampier testified that the wind gauge on the Harwell reflected 10 to 15 miles per hour winds at the time of the accident and that the wind was blowing from the east, or starboard side, pushing the tow to the west. The Harwell was moving at 4.5 to 5 miles per hour. When the tow was 300 or 400 feet from the Bridge, Dampier realized that it was lined up incorrectly. The lookout on the port, or west, side advised him that they were “headed to the bad.” Dampier testified that he tried to adjust the tow’s position to the starboard side as they proceeded north but that the wind made this difficult. He noted that empty barges are more susceptible to being affected by wind and that they also create a visibility problem for the pilot, as they sit higher on the water.

Dampier did not reduce speed as he attempted to maneuver through the Bridge. He stated that reducing speed would have made things worse, as the wind’s effect on the tow’s course would have increased. Instead, he continued to steer toward the starboard side in an unsuccessful effort to avoid making contact with the protection pier on his port side. Dampier testified that after making contact with the pier, he was able to bring the tow around to the correct direction and complete the Harwell’s passage through the Bridge. When asked why, despite his best efforts, he was unable to avoid hitting the pier, he answered:

I was off to the bad more than he [the lookout] indicated so it didn't give me enough room or enough time to clear the lower end of the bridge or the turntable to avoid an allision with it, to proceed through.

Unofficial Realtime Transcript, Day 2, p. 138.

Dampier testified that he was not disciplined due to this allision. He ultimately received his pilot’s license in April 2017. He acknowledged that the purpose of serving as a steersman was to learn how to be a pilot and that the allision on April 24, 2015, was a learning experience. Among other things, the incident taught him to plan ahead more

and to adjust to the wind and the current. Dampier further testified that he has steered as many as 15 barges at a time through the Bridge since April 24, 2015, and has had no problem getting through without making contact. He stated that he feels safe passing through the Bridge now because he knows how to do it.

C. Damages

Jerry Gelwicks, a DME employee who works as the operator (or tender) of the Bridge, was on duty on the morning of April 24, 2015, and witnessed the allision. From his work station in the bridge tender house, located on the swing span, he felt the Bridge lurch from the impact. Gelwicks then radioed the Harwell to advise the pilot that the vessel had caused damage to the Bridge. After making that contact, Gelwicks went to the area of impact with a flashlight to inspect the damage. He noted broken timbers on the south protection pier and also observed damage to the swing span's grease platform. Because it did not appear that the damage to the grease platform would impede the operation of the Bridge, he went back to the bridge tender house and returned the swing span to the closed position. However, under DME's operating procedures, rail traffic was not allowed on the bridge until it could be fully inspected.

Gelwicks then called the Coast Guard to report the incident. He also notified his immediate supervisor, Bruce Wold, and completed a written incident report (Ex. 44). In his report, Gelwicks stated that at the time of the allision the winds were calm, the temperature was 30 degrees Fahrenheit and the river stage was 11.75. Gelwicks testified that this river stage was not particularly high. The report further noted that the Bridge was opened at 4:50 a.m. and that impact occurred at 4:59 a.m.

Wold testified that he was a Manager of Bridge Maintenance for DME on April 24, 2015, and that he received Gelwicks' call at around 5:00 a.m. on that date. Wold confirmed Gelwicks' testimony that because of the allision, no traffic was permitted to cross the Bridge until an inspection could occur. Wold traveled to the Bridge and arrived by 6:30 a.m., as the sun was rising. He recalled that the winds were calm at that time.

He inspected the damage and took various photographs, including Exhibits 128 through 131.

Based on the damage to the grease platform under the swing span, Wold believes the barge that struck the protection pier must have risen up on impact, reaching a high enough level to impact the platform. Also, due to the amount of damage to the protection pier, Wold was concerned that the Bridge was vulnerable to further damage while in the open position. Specifically, he believed that if another vessel made contact with the damaged protection pier, it could breach that pier and make direct contact with the span itself.³

Wold shared his findings and concerns with his supervisor, Daniel Sabatka. Sabatka directed him to make arrangements with two contractors to begin prompt repairs on a time-and-materials basis: JF Brennan (Brennan) for the protection pier and E80 Plus (E80) for the grease platform. Wold made these arrangements, as directed. He testified that Brennan completed its repairs to the protection pier on May 1, 2015, while E80's repairs to the grease platform were completed soon after. DME claims total damages of \$276,860.85 as a result of this allision. Nearly all of this total arises from the invoices issued by Brennan and E80, with small, additional amounts consisting of labor and materials provided by DME's parent company, Canadian Pacific Railway (CP).

Additional facts concerning damages and other relevant issues will be addressed in the analysis section of this ruling, as necessary.

IV. DISCUSSION

On remand, I must consider whether comparative negligence on the part of DME caused or contributed to the damages from the allision on April 24, 2015. If DME was comparatively negligent, the judgment awarded to DME must be reduced by the degree

³ Wold acknowledged that despite his concerns about the Bridge being vulnerable because of the damage to the protection pier, both channels of river traffic through the Bridge remained open. He testified that this was the Coast Guard's decision.

to which DME is liable for the damages. I will summarize the parties' arguments on remand before setting forth my own analysis and conclusions.

A. *Ingram's Arguments / DME's Responses*

Ingram argues that DME should be held comparatively negligent due to the configuration and design of the Sabula bridge. Doc. No. 91. Ingram focuses on three elements of the Sabula bridge's design: (1) the bridge's antiquated configuration results in channels that are unreasonably narrow, (2) the bridge's southern protection pier is not sufficiently strong and (3) the bridge's grease platform is too large and unreasonably obstructs the channel by hanging over the southern protection pier when the bridge is open. *Id.* Based on these factors, Ingram argues that DME should be apportioned at least 50 percent of the fault for the allision. *Id.* at 14.

1. *The Sabula Bridge's Channels*

Ingram argues that the Sabula bridge – which was authorized and completed in the 1880s – is antiquated and unreasonably obstructive for today's forms of river traffic and should be replaced. *Id.* at 3–6. As originally designed, the bridge creates two 154-ft. channels that cause a substantial constriction on the Mississippi River's shipping channel that is, otherwise, 300 feet wide. *See id.* at 4–5. The bridge's channels provide, at most, 24 feet of clearance on either side of modern towing configurations. *Id.* at 4. The narrow channels – combined with the location of the bridge and natural conditions such as wind and currents – make the Sabula bridge one of the most difficult bridges to pass on the upper Mississippi River and caused or contributed to at least 250 reported allisions between 1972 and 2016. *Id.* at 3–4.

Ingram further contends that the bridge is currently one of only eight bridges nationwide that the Coast Guard has “declared as unreasonably obstructive” under the Truman-Hobbs Act (the Act). *Id.* at 4–5. Although the Act does not require such bridges to be replaced, Ingram argues that the designation was based, in part, “on the frequency

of allisions caused by the narrow width of the channel spans combined with natural conditions at the site.” *Id.* at 5. Additionally, the original permit for the Sabula bridge “was specifically conditioned on the railroad’s obligation to modify the bridge as necessary to adjust to the changing needs of maritime navigation.” *Id.*

Ingram also argues that DME’s construction budget is sufficiently large to pay for a new bridge and that DME should use its own funds to build a bridge that better accommodates modern conditions and reduces the risk of allisions. *Id.* Although Congress has not recently set aside funds to contribute to bridge renovations under the Act, at least 438 bridges were altered by their owners without government funding over a ten-year span. *See id.* at 5–6. If DME is not held liable for the Sabula bridge’s antiquated design, DME will never have an incentive to protect itself or reduce the risk of allisions because it can “pass 100% of the costs of repairs and maintenance on to the barge owners.” *Id.* at 6.

DME responds by noting the Eighth Circuit’s ruling affirms the proposition that the Sabula bridge’s designation as an unreasonable obstruction imposes no duty on DME to replace it. Doc. No. 92 at 14–15. The only duty imposed on DME as the owner of the Sabula bridge is one of reasonable care, and “that duty does not mean it is negligent to refuse to buy a bridge [DME] does not need, when the risk of harm and cost of harm is very low compared to the very high cost of replacement.” *Id.* at 15. DME also argues that Ingram has misinterpreted or misrepresented its budgets and finances regarding construction and maintenance for bridges. *Id.* at 16. According to DME, paying for a new bridge would be much more burdensome on the company and its shareholders than Ingram alleges. *See id.*

2. *The Structure of the Southern Protection Pier*

Due to the number of allisions with the Sabula bridge over the years, Ingram argues that DME should have replaced the wooden structure of the southern protection pier with stronger materials. Doc. No. 91 at 6. Specifically, Ingram cites a 2014 allision

that caused nearly \$3 million worth of damages to the southern protection pier. *Id.* It argues that DME should have used this occasion to install a structure similar to its northern protection pier, which is made of concrete and steel. *Id.* at 6–7. Ingram argues that “a stationary object placed in a navigable waterway, such as a pier, is expected to withstand normal impacts.” *Id.* at 7. Because there have been many allisions over time, “bumping” the protection pier is an acceptable strategy for navigating the bridge’s channels, and wooden structures have received significant damage in the past, DME was comparatively negligent by not building a stronger protection pier. *Id.* at 6–7.

DME’s first response to these claims is a procedural argument. Doc. No. 92 at 17. DME notes that my previous ruling stated, in my findings regarding damages, that “Ingram raises other arguments concerning mitigation of damages, including an argument that [DME] acted unreasonably by failing to construct a concrete bullnose on the south protection pier when DME reconstructed that pier in 2014. I have considered all of Ingram’s arguments and find them to be unavailing.” *Id.* (quoting Doc. No. 59 at 18). Ingram did not file a post-trial motion on or appeal this finding. *Id.* Thus, DME contends that Ingram is precluded from raising any arguments regarding the structure of the southern pier on remand. *Id.*

DME also argues that Ingram’s arguments regarding the southern pier fail on their merits. *Id.* DME states that there is no evidence in the record that the Coast Guard would approve such a structure, as is required by law. *Id.* at 17–18. Additionally, although such a rigid structure carries some benefits, it also carries a number of risks for river traffic. *Id.* Allisions with stronger concrete structures can cause greater damage to barges and lead to their leaking or sinking. *Id.* at 18. DME also notes that there is no evidence in the record that a concrete structure would have resulted in any less property damage to DME. *Id.* Ingram did not provide any evidence regarding the impact of its barge with the Sabula bridge. *Id.* Thus, the record lacks sufficient evidence to find that a structure made of different material would have resulted in greater protection for DME. *Id.*

3. *The Grease Platform*

Ingram argues that the already too narrow channel was only further constricted by the Sabula bridge's grease platform hanging over the southern pier. Doc. No. 91 at 7. Ingram notes that DME replaced its old wooden grease platform with one made of steel in 2011. *Id.* The new steel structure extends beyond the wooden protection pier beneath it creating an even greater risk of allision by a passing vessel. *Id.* at 7–8.

DME again responds by arguing that Ingram cannot reargue this issue on remand because it did not appeal my prior findings. Doc. No. 92 at 19. Beyond that argument, DME also argues that any obstruction by a bridge must be an obstruction in fact. *Id.* DME claims that the grease platform did not extend beyond the edge of the southern protection pier at the time of the accident. *Id.* Because Ingram has not provided evidence to the contrary, there is no way to know that the grease platform created any greater obstruction to the barge's path. *Id.*

B. *DME's Arguments / Ingram's Responses*

DME argues that negligence in admiralty law is determined by the balancing test proposed by Judge Learned Hand in *United States v. Carroll Towing Co.*, 159 F.2d 169, 173 (2d Cir. 1947). Doc. No. 92 at 4–5. The test looks to (1) the likelihood that an injury-causing circumstance will occur, (2) the gravity of the harm if that circumstance occurs and (3) the burden of precautions that would prevent the injury-causing circumstance from occurring. *Id.* Analyzing the facts of this case in light of these factors, DME argues that it was not comparatively negligent in maintaining the current configuration of the Sabula bridge. *Id.* at 8–13. In its reply, Ingram argues that DME's application of the *Carroll Towing* test is flawed. *See* Doc. No. 93. I will discuss the parties' arguments regarding each element of the test separately.

1. *The Likelihood of Harm*

DME argues that the current configuration of the Sabula bridge presents a “very

low” risk of harm. Doc. No. 92 at 8. DME cites to a Truman-Hobbs report (Exhibit BB) that indicates that there were 63 allisions at the Sabula bridge over an eleven-year span. *Id.* Comparing the number of allisions (63) with the number of commercial tows that passed through the bridge’s channels during those eleven years (27,663) indicates that an allision occurred at the bridge on only 0.2 percent of passages. *Id.* DME also notes that even accounting for unreported allisions at the Sabula bridge – for example, assuming four out of five allisions were not reported – the frequency of allisions would be no more than one percent of passages. *Id.* Comparing this data to the information regarding allisions over a 44-year period presented at trial yielded the same probabilities. *Id.* at 8–9.

Ingram responds by arguing that DME – despite its attempt to accommodate unreported allisions in its analysis – failed to accurately consider “the frequency and cost of allisions” reported by the Coast Guard in the Truman-Hobbs report. Doc. No. 93 at 5. Ingram argues that the report DME relied on presented only “extremely conservative” calculations. *Id.* Accordingly, the likelihood of an allision occurring, and the resulting damage to the bridge and barges, is higher than DME argues. *Id.*

Ingram also focuses its likelihood-of-harm analysis on the number of allisions generally rather than the probability an allision will occur on any given passage. *Id.* at 6. To do otherwise “ignores the inevitability and severity of annual allisions and their resulting damages.” *Id.* Ingram argues that the appropriate analysis looks to “the anticipated reduction in costs” by widening the bridge, “not the percentage of hits compared to misses of vessels that pass through the Sabula Bridge.” *Id.* at 4 n.2. Allisions with the Sabula bridge occur approximately six times per year, making the likelihood of multiple future allisions practically certain. *Id.* at 6. The Coast Guard reported that at least 95 percent of these allisions would be prevented by widening the bridge. *Id.* Thus, to prevent future damages, DME should be held responsible for not widening the bridge. *See id.*

2. *The Gravity of Harm*

Looking again to the Truman-Hobbs report, DME argues that the annual cost of repairs to the Sabula bridge due to allisions is approximately \$231,175. Doc. No. 92 at 9. DME notes that some allisions cause much more damage, such as the 2014 allision that caused nearly \$3 million in damage, but “long-term evidence shows average annual costs in the hundreds of thousands.” *Id.*

Ingram argues that DME’s cost calculations do not adequately account for the damage caused by allisions. Doc. No. 93 at 4–5. Ingram again notes that the Truman-Hobbs report presented only “extremely conservative” calculations regarding damages due to allisions. *Id.* Ingram also argues that DME inappropriately excluded more modern allisions that resulted in much higher damages from its calculation. *Id.*

3. *The Burden of Precautions*

Both parties agree that replacing the Sabula bridge would cost approximately \$70 million. However, the parties disagree about how that number should be interpreted when analyzing the burden replacing the bridge would put on DME.

DME argues that replacing the Sabula bridge is an immediate out-of-pocket cost that is unnecessary and does not benefit DME or its shareholders. Doc. No. 92 at 9–10. It also argues that the cost of a new bridge is a much greater burden than is justified by the probability and gravity of harm caused by the bridge in its current state. *Id.*

Ingram argues that DME misrepresents the true cost of replacing the bridge. Doc. No. 93 at 3–5. Ingram takes issue with DME’s assertion that a new bridge provides no benefit, as a new bridge would allow DME to save repair costs and would add “decades of useful life” to the bridge. *Id.* at 3. Ingram also argues that evaluating the \$70 million cost of a new bridge in isolation is incorrect. *See id.* at 4. Instead, the cost should be annualized before being compared to the amount of damages caused by allisions. *Id.* When this is done, Ingram argues that the burden imposed on DME is less than the yearly average of damages due to allisions. *Id.*

C. *The Law of Comparative Negligence in Allision Cases*

The Eighth Circuit noted that, fundamentally, a negligence case in admiralty law is no different than a land-based negligence case. *Ingram Barge Co.*, 918 F.3d at 971. A plaintiff bears the initial burden of proving by a preponderance of the evidence “that the defendant breached a legal duty [and] caus[ed] the injury sustained by the plaintiff.” *Id.* However, based on “[e]xperience and common sense,” admiralty law has developed a collection of rebuttable presumptions and shifting burdens of proof. *Id.* For example, the *Oregon* rule “creates a rebuttable presumption that a moving vessel breached its duty of care when it allides with a stationary object.” *Id.* Failure to rebut the *Oregon* presumption will result in a finding that the defendant was negligent. *See id.*

When a defendant is found negligent for an allision, by un rebutted presumption or otherwise, a plaintiff may yet be found partially at fault for his or her damages from the allision under the doctrine of comparative negligence. *Id.*; *see also Bessemer & Lake Erie R.R. Co. v. Seaway Marine Transp.*, 596 F.3d 357, 362–63 (6th Cir. 2010). If a plaintiff’s conduct was negligent, and such negligence was “a contributory or proximate cause of the” allision or the ultimate damages stemming therefrom, the plaintiff’s recoverable damages will be reduced according to the plaintiff’s fault.⁴ *See Am. River*

⁴ As some courts have noted, there is some confusion and debate about the scope of comparative negligence in admiralty law, particularly in allision cases. *See City of Chicago v. M/V Morgan*, 248 F. Supp. 2d 759, 775–76 (N.D. Ill. 2003) (noting the confusion and discussing cases), *aff’d*, 375 F.3d 563 (7th Cir. 2004). The confusion arises from uncertainty regarding whether comparative fault stems from (1) culpability for the *damages* incurred or (2) culpability for *causing* the injury resulting in damages. *Id.* In other words, can a plaintiff be held comparatively negligent only if that negligence is a but-for cause of the accident and damages, or can a plaintiff be held comparatively negligent if the negligence is a proximate or contributing cause to the ultimate severity of his or her damages even if not a but-for cause of the accident? Most courts, and the Second Restatement on Torts, agree with the latter proposition. *See Arkansas State Highway Comm’n v. Arkansas River Co.*, 271 F.3d 753, 759 (8th Cir. 2001) (district court could have apportioned fault among two parties whose “conduct proximately caused the bridge damage” when a vessel’s boom struck a bridge); *Am. River Transp. Co. v. Kavos Kaliakra SS*, 148 F.3d 446, 450 (5th Cir. 1998) (plaintiff was not held comparatively negligent – even though it moored its barges in violation of federal law and the barges were a but-for cause of the allision – because the barges were not a proximate cause of the allision); *M/V Morgan*, 248 F. Supp. at

Transp. Co. v. Kavo Kaliakra SS, 148 F.3d 446, 450 (5th Cir. 1998); *City of Chicago v. M/V Morgan*, 248 F. Supp. 2d 759, 776 (N.D. Ill. 2003), *aff'd*, 375 F.3d 563 (7th Cir. 2004); *see also* Restatement (Second) of Torts § 463 (1965) (“Contributory negligence is conduct on the part of the plaintiff which falls below the standard to which he should conform for his own protection, and which is a legally contributing cause co-operating with the negligence of the defendant in bringing about the plaintiff's harm.”); *Id.* § 465 cmt. c (apportioning damages under comparative negligence is appropriate “where the antecedent negligence of the plaintiff is found not to contribute in any way to the original accident or injury, but to be a substantial contributing factor in increasing the harm which ensues”). This is true even when a bridge is compliant with all laws and regulations and the bridge owner bears no “affirmative legal duty to alter the bridge’s configuration.” *Ingram Barge Co.*, 918 F.3d at 973.

A bridge owner is comparatively negligent for damages from an allision if his or her “conduct falls below the standard to which he is required to conform for his own protection.” *S.C. Loveland, Inc. v. E.W. Towing, Inc.*, 608 F.2d 160, 166 (5th Cir. 1979); Restatement (Second) of Torts § 463. The standard of care in such cases is “that of a reasonable person under like circumstances.” *S.C. Loveland*, 608 F.2d at 166. Thus, the question is whether the bridge owner failed to reasonably safeguard his or her own property, not whether he or she breached any duty owed to others. *Id.*

One relevant factor is industry custom. *See* Thomas J. Schoenbaum, 1 Admiralty & Mar. Law § 5:4 (6th ed.), Westlaw (database updated November 2019) (duty of care

Restatement (Second) of Torts § 465 (1965) cmt. c. I agree that the proper scope of a comparative negligence analysis asks not only whether the plaintiff’s negligence played a role in causing the injury, but also whether the plaintiff’s negligence was a proximate cause of the ultimate severity of damage. As always, in a proximate cause analysis “fault is limited to foreseeable harms.” *City of Chicago v. M/V Morgan*, 375 F.3d 563, 579 (7th Cir. 2004); *see also* *S. C. Loveland, Inc. v. E. W. Towing, Inc.*, 415 F. Supp. 596, 606 (S.D. Fla. 1976) (plaintiff was comparatively negligent for damage to bridge because it “was negligent in taking no action to prevent [a] drifting barge from colliding with its bridge” and “the possibility of an eventual collision with the bridge was foreseeable”), *aff'd*, 608 F.2d 160 (5th Cir. 1979).

in admiralty is derived from (1) laws and regulations, (2) custom and (3) demands of reasonableness and prudence); *see also Folkstone Mar., Ltd. v. CSX Corp.*, 64 F.3d 1037, 1046 (7th Cir. 1995) (same). Industry customs and practices are relevant to the reasonableness of a party's conduct, but they are not necessarily dispositive. *See, e.g., Complaint of Paducah Towing Co., Inc.*, 692 F.2d 412, 426 (6th Cir. 1982). The fact that a course of conduct is a generally accepted industrial practice or custom does not mean that it is reasonable. *Id.* However, failure to abide by a generally accepted industry practice or custom provides strong evidence that a person's conduct is unreasonable. *See, e.g., Tittle v. Aldacosta*, 544 F.2d 752, 756 (5th Cir. 1977).

Courts also determine whether a person has met the standard of care by employing a test that balances “the probability and severity of the harm” a person's actions pose against the burden imposed in reducing the probability or severity of that harm. *See, e.g., Miller v. Patton-Tully Transp. Co.*, 851 F.2d 202, 205 (8th Cir. 1988); *see also In re Am. Milling Co., Ltd.*, 409 F.3d 1005, 1021 (8th Cir. 2005) (discussing the number of allisions with a moored boat over time, the nature of its location and the severity of potential harm from allisions in finding that owner of moored boat was comparatively negligent). This test was first introduced in the famous *Carroll Towing* case, an admiralty case, and has become ubiquitous in the law of negligence. *See, e.g., I&M Rail Link, LLC v. Northstar Nav., Inc.*, 198 F.3d 1012, 1016 (7th Cir. 2000) (holding that case should be remanded to consider whether owner of the Sabula bridge – the same bridge in this case – was comparatively negligent under the *Carroll Towing* formula).

D. Analysis

Ingram has asserted three reasons why DME should be found comparatively negligent for the current configuration and design of the Sabula bridge. I will begin by addressing Ingram's argument that DME's failure to alter the configuration of the outdated Sabula bridge is negligent.

1. The Configuration of the Sabula Bridge and its Channels

Whether DME is guilty of comparative negligence for the allision in this case due to the configuration of the Sabula bridge depends on whether a reasonable and prudent bridge owner, in similar circumstances, would alter the configuration of the bridge in order to prevent allisions and damage to his or her property. Having considered the evidence and the relevant case law, I find Ingram has failed to establish that DME was comparatively negligent due to the configuration of the Sabula bridge.

In my prior ruling, I found that, “[w]ithout a doubt, Ingram has demonstrated that this Bridge poses a difficult obstacle to barge traffic, at least as compared to more modern bridges.” Doc. No. 59 at 13. I also acknowledged that the Coast Guard’s findings regarding the bridge were relevant, even if they did not rebut the *Oregon* presumption alone. *Id.* at 11–12. It is clear that the risk of allisions at the Sabula bridge is higher than at most modern bridges on the river. However, Ingram was unable to prove, and I did not otherwise find, that DME had any legal obligation to alter the configuration of the Sabula bridge. *Id.* at 13–14.

Beyond these points, other findings from my prior ruling weigh in favor of finding that Ingram was solely at fault and DME was not comparatively negligent. I gave great weight to the testimony of Hershey Dampier, the steersman for Ingram at the time of the allision, who was on his first trip as a licensed steersman. Doc. No. 59 at 14. Dampier described the mistakes he and others made and explained what he had learned from them. *Id.* at 14–15. He also “testified that he has steered as many as 15 barges at a time through the Bridge since [the allision] and has had no problem getting through without making contact. . . . [H]e feels safe passing through the Bridge now because he knows how to do it.” *Id.* at 15.

Dampier’s testimony weighs heavily in favor of finding that the allision in this case was not due to the bridge’s configuration being unreasonable, but instead due to the inexperience and negligence of Ingram’s employees. Based on the testimony, I concluded that the “allision was caused by a combination of (a) Dampier’s inexperience, (b)

Hinton's failure to provide adequate supervision . . . and (c) the lookout's failure to adequately communicate the degree to which the Harwell was off to the bad." *Id.* Dampier's inexperience at the time of the accident, and his subsequent comfort with passing through the Sabula bridge, supports the proposition that DME is not negligent due to the configuration of its bridge.

Other factors support this conclusion. The lack of evidence regarding industry custom in this case supports a finding that DME was not comparatively negligent. There is no evidence in the record indicating that it is industry custom for bridge owners to renovate lawful bridges due to the fact that allisions have occurred periodically. Ingram provided testimony alleging that 438 bridge owners applied to voluntarily alter their bridges in a ten-year span starting in 2006. Doc. No. 77 at 89–90. However, the document from which this data was gleaned was ultimately excluded as hearsay. *Id.* at 93. Even if that document was admitted, it would not provide sufficient evidence that bridge owners customarily expand or otherwise alter the configuration of their bridges in order to protect their property from allisions. Although 438 bridge owners may have chosen to expand or otherwise alter their bridges, I can do no more than guess at their reasons for doing so. Ingram failed to provide evidence of custom or industry practice to support a finding that not altering the Sabula bridge was unreasonable conduct.

The *Carroll Towing* test provides further support that the current configuration of the Sabula bridge is reasonable and DME is not comparatively negligent. The cost of precautions to prevent these allisions (replacing the bridge) outweighs the benefit obtained by that precaution (preventing allision-related losses).⁵ In reaching this conclusion, I give

⁵ The standard of care is important to, but not ultimately dispositive for, this conclusion. As noted, the standard of care for comparative negligence stems from a duty to protect one's self from foreseeable harms, not duties to others. Thus, the benefits considered in the *Carroll Towing* test relate to benefits to DME by preventing allisions, not necessarily all benefits to society in general. Although considering the benefits to other parties if allisions are reduced certainly makes the case closer, I find that the relative infrequency of allisions still renders the prevented losses less than the ultimate burden of replacing the bridge.

great weight to the infrequency of reported allisions with the Sabula bridge when compared to the number of vessels that pass through the Sabula bridge's channels.

The Coast Guard's report reveals that over an 11-year span, 63 of 27,663 passages resulted in an allision.⁶ *See* Exhibit BB at 7-9. This equates to just over two-tenths of one percent, or about one allision for each 439 passages. There was also testimony at trial that there were 250 allisions over a 44-year period, with approximately 2,500 to 3,000 passages per year. Doc. No. 77 at 76, 99. Evaluating these numbers most favorably to Ingram (using 2,500 passages per year) results in almost the identical conclusion, with allisions occurring on just over two-tenths of one percent of all passages, or roughly one allision for each 440 passages.

Both parties agree that the typical amount of damages from a severe allision is at least in the hundreds of thousands of dollars. However, the infrequency of allisions makes the harm to be avoided by replacing the Sabula bridge minimal when compared to the time and great expense required to replace the bridge. A reasonable person in DME's place would not find replacing the bridge warranted.

Ingram takes issue with this conclusion, arguing that the number of allisions should be considered independent of the number of passages that occur. The evidence indicates that the Sabula bridge averages approximately six allisions per year. Thus, because the likelihood of future allisions is high, and the Coast Guard believes that 95 percent of allisions would be avoided if the bridge is replaced, DME should be found negligent for not attempting to avoid these future allisions.

Ingram's arguments have some merit, at least pertaining to the foreseeability

⁶ Ingram cites testimony that as much as "ten percent of passing tows make contact with the protection piers and one to two percent of passing tows cause damage." Doc. No. 91 at 4. I have considered this testimony but find that it is not irreconcilable with, nor more persuasive than, the other data. The fact that so many tows make contact with the piers provides evidence of foreseeability, but it does not mean that the contact is negligent or unreasonable for either party. Indeed, the fact that as many as ten percent of vessels make some kind of contact with the piers with only one to two percent causing some amount of damage makes it appear all the more negligent when a vessel causes extensive amounts of damage, as in this case.

element of comparative negligence. The evidence is quite clear that, although some years had no allisions, the likelihood of multiple allisions occurring in any given year is high. Exhibit BB at 9. DME cannot claim that allisions with the Sabula bridge are not foreseeable, nor has it attempted to.

However, Ingram's position is ultimately untenable. Divorcing the number of allisions from the number of total passages is inconsistent with a *Carroll Towing* analysis and the law of negligence. Focusing only on the total number of foreseeable negative outcomes eviscerates the balancing nature of the *Carroll Towing* test. Considering only that an average of six allisions per year may occur at the Sabula bridge does not permit one to discount the costs of that outcome, as the *Carroll Towing* test requires, nor does it provide any standard for determining whether or not such a number is reasonable. Six allisions out of twelve passages per year suggests a much different (and concerning) problem than six allisions out of 2,500 to 3,000 passages per year. Taking the number of allisions out of context also disregards benefits that come from the bridge as currently configured, i.e., the fact that it fulfills its purpose of transporting trains over the river while still allowing clear passage for vessels over 99 percent of the time.

Further, the purpose of negligence law is not to prevent or establish liability for every harm that occurs. Only those accidents that are caused by a person's unreasonable conduct result in liability. The *Carroll Towing* test provides a balancing framework for determining what is, and is not, reasonable. Here, that test indicates that DME has not acted unreasonably. To impose comparative fault liability on DME unless it takes all necessary steps to prevent accidents, regardless of cost, is to enforce a form of strict liability, not negligence.

Ingram notes that the Seventh Circuit Court of Appeals analyzed the same statistical evidence unfavorably to the then owner of the Sabula bridge in *I&M Rail Link*. In that case, the Seventh Circuit held that the district court must consider whether the current configuration of the Sabula bridge caused the allision at issue. *I&M Rail Link*, 198 F.3d at 1015–16. The court noted, as I have above, that 63 out of 27,663 passages

– or 1 in 439 – resulted in allisions. *Id.* The court then analogized this to other forms of transportation:

I&M Rail Link says that [these statistics] show[] that the bridge is safe; with careful navigation a pilot can transit without incident. But the Coast Guard drew a different inference: it concluded that a bridge should have a much lower accident rate. What would one think of a highway bridge struck by one out of every 500 passing cars? Or an airport designed so that one of every 500 landings produced an accident? What if one of every 439 trains passing over the Sabula Bridge derailed? An accident rate of 1 in 439 is too high for river transportation, the Coast Guard concluded.

Id. at 1015. The court gave great weight to the Coast Guard’s evaluation, skeptically concluding that “[i]t is unlikely that all of these allisions can be attributed solely to pilots’ negligence.” *Id.* at 1016.

While I agree that there is no evidence to suggest that every allision is due entirely to pilot error, I am not persuaded by the Seventh Circuit’s analysis. First, the comparison to accidents arising in other forms of travel overstates the issue in one way and overlooks it in another. Most noticeably, the court did not discuss the relative costs, in terms of loss of human life, personal injuries and property damages, that are likely to occur as a result of the “planes, trains and automobiles” accidents it hypothesized in *I&M Rail Link*. An airplane crash, a train derailment and the collision of a car with a highway bridge may very well result in deaths and serious injuries in addition to significant property damage. Additionally, the court’s analogy disregards the question of negligence. While a highway bridge that is struck by one out of every 500 passing cars is concerning when drivers are *never* negligent, the concern diminishes drastically when considering that some, and perhaps most, of those who struck the bridge had acted negligently in some way. It is also less concerning when considering that there were 499 drivers who, *whether negligent or not*, were still able to pass under the bridge without striking it.

Relating these points back to the Sabula bridge shows why the relatively small number of allisions is so persuasive. Although historically approximately one out of every 439 vessels has allided with the Sabula bridge and caused significant damages, 438

out of 439 vessels have been able to pass through its channels without causing significant harm, regardless of whether any of those 438 vessels acted with negligence while passing through.

Second, the Seventh Circuit's analogy overlooks the fact that only those who *negligently* allide with the Sabula bridge will be held liable for the resulting damage to it. There is no doubt that the Sabula bridge provides a narrower passage than almost anywhere else on the Mississippi River, making it one of the most difficult to pass through. It is also true that admiralty law has created a presumption that any vessel that strikes a stationary object did so negligently. This makes the diminished room for error when passing through the Sabula bridge's channels even riskier for the barges that do so.

However, the presumption against vessels is rebuttable. The presumption shifts the burden of proof but does not impose ultimate liability. *M/V Morgan*, 375 F.3d at 572. Defendants who show that that they exercised all due care during the passage, or that the allision was the result of an inevitable accident, will overcome the presumption and, most likely, be completely absolved from liability.⁷ See *Ingram Barge Co.*, 918 F.3d at 971 (quoting *Bunge Corp. v. M/V Furness Bridge*, 558 F.2d 790, 795 (5th Cir. 1977)).

When damages occur to the Sabula bridge from an allision that is not the result of a vessel's negligence, or is the result of an inevitable accident, DME bears full responsibility for the harm to its bridge that results from leaving it in its current configuration. This is not inconsistent with the Seventh Circuit's position that some allisions "must be chalked up to the fact that the bridge was designed for navigation in a different era." *I&M Rail Link*, 198 F.3d at 1015. When allisions occur without negligence by vessels, DME will have to reconsider whether replacing the bridge is a

⁷ Vessel owners may argue that the shifting burden of proof under the *Oregon* presumption is too hard to rebut. However, the statistics in this case (allisions on 0.2 percent of passages) demonstrate why the presumption is appropriate. This is especially true considering the Sabula bridge endures more allisions than most bridges.

warranted and reasonable step to protect its property. So far, it has found no need to replace the bridge and the *Carroll Towing* test does not indicate that this decision is unreasonable or negligent.

At first blush, this may appear to eliminate the possibility a bridge may be found comparatively negligent. Ingram essentially expresses this concern in its argument that by not holding DME comparatively at fault for allisions due to the configuration of the Sabula bridge, DME will never be incentivized to build a new bridge that caters to modern forms of travel and reduces the total number of allisions. Barges suffer damage from allisions too, and it is unfair to place the burden of these allisions only on the barge owners. While I understand these concerns, Ingram overlooks some key points.

First, as just discussed, finding that DME is not comparatively negligent simply because of how the Sabula bridge is currently configured does not mean that DME will be able to recover damages from every allision. DME is able to recover damages to its bridge only when those damages arise from the negligent conduct of others that cause allisions.

Second, the Sabula bridge is currently a lawful bridge. Its structure is certainly outdated and out of line with the nature of modern river commerce, but it meets all current federal laws and regulations. If the Sabula bridge ever fails to meet applicable standards, whether they relate to the size of its channels or not, the bridge can certainly be held comparatively negligent. *See Matter of Complaint of Foss Mar. Co.*, 114 F. Supp. 3d 452, 457 (W.D. Ky. 2015) (bridge owner's noncompliance with the Coast Guard's navigational lighting regulations was a factor to consider in comparative negligence analysis).

To that point, if the laws and regulations governing bridges over navigable waterways are changed to require wider channels, DME will be forced to update its bridge to be consistent with modern forms of river traffic. Vessel owners and others who must use the bridge can always appeal to the political process to achieve their goals of improving river commerce. Indeed, forcing or incentivizing DME to rebuild its bridge

through the political process is much more appropriate than trying to do so through the doctrine of comparative negligence. *In re City of New York*, 475 F. Supp. 2d 235, 242 (E.D.N.Y. 2007), *aff'd*, 522 F.3d 279 (2d Cir. 2008) (“A rule making the enterprise liable for the accidents that occur” when the cost of precautions exceeds the benefit of accident avoidance “cannot be justified on the ground that it will induce the enterprise to increase the safety of its operations” (quoting Richard A. Posner, *Economic Analysis of Law* 33 (6th ed. 2003))).

To conclude, based on the evidence in this record, I find that this allision occurred solely due to the negligence of Ingram and its employees. I find no factual basis to assess any amount of comparative negligence against DME based on the configuration of the Sabula bridge.

2. The Southern Protection Pier and Grease Platform

The parties disagree about whether considering this issue is appropriate on remand. Ingram argues that DME is comparatively negligent for damage to the southern protection pier because it should have constructed it out of stronger materials, like the northern protection pier. It also claims that the increased length of the current grease platform created an obstruction to the Sabula bridge’s channel sufficient to hold DME comparatively liable.

DME claims that these arguments have been forfeited because they were ruled on previously in this case and those rulings were not appealed. Thus, they cannot be raised again on remand. In the alternative, DME argues that the wooden structure of the pier does not constitute negligence because (1) there is no guarantee that a different structure would be approved by the Coast Guard and (2) there is insufficient evidence in the record showing that a different structure would better protect or be safer for the bridge or the vessels passing through it.

As noted above, comparative negligence looks not only to whether a plaintiff’s negligence caused an injury, but also to whether a plaintiff’s negligence is “a substantial

contributing factor in increasing the harm which ensues” despite not “contribut[ing] in any way to the original accident or injury.” Restatement (Second) of Torts § 465 cmt. c. Thus, failure to make an alteration to part of a bridge’s structure that prevents or reduces the likelihood or extent of damages from foreseeable allisions may give rise to comparative negligence. *See M/V Morgan*, 375 F.3d at 578–79 (bridge owner’s failure to reinstall wooden barrier over recessed slot containing electrical cables was comparative negligence because it could have prevented or reduced the amount of damage to the electrical cables). However, I have previously evaluated and ruled on these claims. The evidence in the record did not support a finding that DME was negligent due to the material of the Sabula bridge’s southern protection pier or the dimensions of its grease platform. Although I made this finding in the damages section of my ruling rather than the liability section, I nonetheless did so in response to Ingram’s arguments that DME was comparatively negligent due to the protection pier and grease platform.

Because Ingram did not appeal my prior findings on these issues, I find that it would be inappropriate to reconsider them now on remand. *See Equal Employment Opportunity Comm'n v. CRST Van Expedited, Inc.*, 277 F. Supp. 3d 1000, 1009 (N.D. Iowa 2017). Even if I was inclined to revisit these issues, I would reach the same outcome. There is simply no evidence to support the assessment of comparative negligence against DME based on the southern protection pier or the grease platform.

V. CONCLUSION

For the foregoing reasons, I find on remand that DME was not comparatively negligent and that Ingram’s negligence was the sole cause of the damages to the Sabula bridge that resulted from the April 24, 2015, allision. As such, and in accordance with my prior findings concerning damages and prejudgment interest, **judgment shall enter** in favor of plaintiff Dakota, Minnesota & Eastern Railroad Corporation, and against defendant Ingram Barge Company, in the amount of **\$276,860.85**, plus prejudgment interest in the amount of **\$26,868.50**. Costs are taxed against the defendant.

IT IS SO ORDERED.

DATED this 19th day of December, 2019.

A handwritten signature in blue ink, appearing to be 'L. Strand', written over a horizontal line.

Leonard T. Strand, Chief Judge