In the matter of the Arbitration
- between
Cook Inlet Spill Prevention & Response, Inc. and
CISPRI Services. LLC
Claimant
- and -

Final Award August 9, 2021

Furie Operating Alaska, LLC Respondent

- X

Before: Dick Corwin (sole arbitrator)

For: Cook Inlet Spill Prevention & Response, Inc. and

CISPRI Services LLC:

Co-counsel:

Nicoll Black & Feig, PLLC, by Chris P. Reilly, Esq. Reitler Kailas & Rosenblatt LLC, by Leo G. Kailas, Esq.

For: Furie Operating Alaska, LLC: Clayton & Demer, LLC, by Kenneth G. Hannam, Esq.

Introduction

CISPRI Services LLC compensated and paid monies to its employee EH as a result of EH having been injured while on the deck of the "Perseverance" (owned by CISPRI Services, LLC) when a wire rope sling portion of a mooring apparatus affixed to a monopod platform owned by Furie Operating Alaska, LLC, parted ("Incident"). CISPRI (Cook Inlet Spill Prevention & Response, Inc. and CISPRI Services LLC hereinafter collectively "CISPRI") claims from Furie all monies paid and expended in connection with the injuries of EH.

The parties

CISPRI Services LLC (hereinafter "CISPRI Services") owned the vessel "Perseverance" ("Vessel") which operated in Cook Inlet, Alaska; CISPRI Services and Cook Inlet Spill Prevention & Response, Inc. were member-owned Alaska entities (same members own both)

which shared employees (mariners working on CISPRI vessels were employed by CISPRI Services). Cook Inlet Spill Prevention & Response, Inc., is a spill response organization.

At relevant times Furie Operating Alaska LLC ("Furie") was a Delaware LLC with offices in Texas and Alaska and owned and operated the offshore monopod natural gas production platform known as the "Julius R Platform" (hereinafter "Platform") located in Cook Inlet, Furie's only production platform. The Platform was attached to the seabed of Cook Inlet by a single about 18' diameter support column and was not a vessel. Installation of the Platform was completed about September 2015, and the Platform began production of natural gas about November 2015. Furie was a member of CISPRI.

Brief description of the Incident and settlement

The Incident occurred January 8, 2016, when the wire rope sling component of Furie's mooring apparatus (connected to a padeye welded onto the support column of Furie's Platform) parted at the Platform end of the wire rope sling. The other end of the wire rope sling was connected, by a shackle and hook, to a bridle at the bow of the Vessel.

The wire rope sling parted while in tension, the Vessel (bow towards the support column and headed into wind, current and waves) having moved astern/away from/fallen back from the support column.

Upon parting in tension at its Platform end, the wire rope sling snapped back to the foredeck of the Vessel. Precisely what happened in that instant cannot be said with absolute certainty, but immediately EH was on the foredeck with his feet towards the bow and his head towards aft having sustained injury to his skull, brain, neck and back. Following evacuation to shore EH was hospitalized for several months, underwent surgeries and various treatments in effort alleviate what were permanent serious injuries, permanent neurological deficits and continuous pain.

After the Incident and up to January 18, 2018, when a settlement was concluded concerning the injuries and resultant claims, no legal action was commenced. In January 2018 the claims were settled in conjunction with a December 2017 mediation in which, amongst others, lawyers representing EH, CISPRI and Furie participated.

To appreciate the procedural background and Rulings leading up to hearings, helpful is to know that significant focus in the arbitration concerned (a) the design, arrangement, installation and adequacy of Furie's mooring apparatus and its wire rope sling component and (b) that the Vessel had the mooring apparatus and its wire rope sling under tension simultaneous with EH being at a position on the foredeck where he could be struck had the wire rope sling or some part of the mooring apparatus failed.

Related focus concerned (a) CISPRI's argument that Furie did not know the "safe working parameters" of the mooring apparatus design and should not have allowed the Vessel to use the mooring apparatus without knowing whether doing so would be safe and (b) Furie's claim that the Vessel's Captain improperly placed the mooring apparatus and wire rope sling under tension without having ensured EH was out of "the snap-back zone of danger" compounded by failing in advance of the operation to have a procedure/agreed communication to confirm the "zone of danger" was clear.

Procedural history prior to appointment of sole arbitrator

In June, 2018, CISPRI demanded Furie arbitrate pursuant to an arbitration clause included in the contractual arrangement which the Vessel was under at the time EH was injured. The arbitration clause provided:

This Charter shall be governed by the General Maritime Law of the United States, excluding any conflicts of laws principles that would direct the substantive law of another jurisdiction to apply, and any dispute arising out of or in connection with this Charter shall be referred to arbitration in Anchorage, Alaska. The arbitration proceedings shall be conducted in accordance with the rules of the Society of Maritime Arbitrators, Inc. ("SMA") before a sole arbitrator . . . Where agreement cannot be reached on the appointment of a sole arbitrator, the arbitrator shall be appointed by the President of the SMA. An award made pursuant to this provision may include costs, including a reasonable allowance for attorneys' fees. The award of the sole arbitrator shall be final and binding on both parties and judgment may be entered upon any award made hereunder in any Court of competent jurisdiction. Nothing in this provision shall bar parties from agreeing to a different venue at the arbitrators' request or upon their mutual agreement.

During September and October 2018 deposition testimony was taken from those on the deck of the Vessel (save for EH) and the Vessel Captain and from two shoreside CISPRI employees as well from a worker on Furie's Platform and two others associated with Furie with knowledge of the Platform. Some were deposed twice and some deposition witnesses deemed to be "30(b)(6) party witnesses" as per the Federal Rules of Civil Procedure.

During the taking of the deposition testimony documents relevant to the issues surrounding the dispute were in the hands of CISPRI and Furie and exhibits were marked.

The parties' above cooperative discovery took place prior to the January 2019 appointment of the arbitrator.

Proceedings in arbitration

CISPRI and Furie early on agreed to a schedule concerning discovery (and resolution of/ruling as to discovery disputes), expert opinions, submission of pre-hearing memoranda/proposed findings of fact and conclusions of law.

By agreement of the parties, subpoenas were issued in the states of Texas and Washington requiring custodians of any documents (essentially concerning the design and arrangement of the mooring apparatus) to produce them at Preliminary Hearings (expected to be virtual) to be held in Houston and Seattle. Because the subpoenaed entities provided substantive responses in advance of the Preliminary Hearings the hearings were cancelled.

In May 2019 the parties entered into a Confidentiality Agreement (acknowledged and agreed by the arbitrator) covering the EH settlement agreement and the January 2018 Release as well as any other documents/information that might subsequently be designated Confidential.

CISPRI in May 2019 requested:

- A finding (styled a "motion for partial summary judgment on the issue of respondent's negligence,") that the negligence of Furie was a proximate cause of injury to EH on January 8, 2016, relying upon the duty of a wharfinger to those using the wharfinger's facility.
- An order to "exclude any and all testimony and reference to the contents of alleged platform mooring arrangement specification and design documents that Furie Operating Alaska, LLC . . . has not produced in discovery."

The parties exchanged extensive memoranda, exhibits and affidavits/declarations in support of and opposition to the requests.

The parties also, in May and June, took deposition testimony from three expert consultants retained by Furie and from fact witness R. Monceaux (associated with Furie).

On August 9, 2019, Furie filed in Delaware for Chapter 11 voluntary bankruptcy, and the automatic stay associated with that filing stayed this arbitration from further proceeding.

On February 21, 2020, the Bankruptcy Court lifted the stay for the limited purpose of permitting the arbitrator to render a decision on CISPRI's two outstanding requests/"motions."

In May 2020 rulings were issued as to CISPRI's May 2019 requests for relief.

As to CISPRI's request for a finding that the negligence of Furie was a proximate cause of injury to EH on January 8, 2016, the request was denied based upon the arbitrator finding that Furie, *vis a vis* the mooring apparatus at the Platform, was not a wharfinger. Leave was given to CISPRI to renew the request premised upon alternative basis/bases provided that conflicts amongst/between the contract documents governing employment of the Vessel first either were resolved by the parties by agreement or, based on submissions to be made by the parties, by the arbitrator.

The request for an order to "exclude any and all testimony and reference to the contents of alleged platform mooring arrangement specification and design documents that Furie Operating Alaska, LLC . . . has not produced in discovery" was denied based upon the arbitrator rejecting CISPRI's spoliation argument ("Nothing in the current record evidences that the target of CISPRI's request for relief – demanded of Furie but unproduced mooring arrangement design or specification document/s - existed after the January 8, 2016, incident," a necessary predicate to demonstrating spoliation) and upon generally accepted implications of Section 21 of the SMA Arbitration Rules (stating, in part, that "Rules of evidence used in judicial proceedings need not be applied").

A focus of CISPRI's request to exclude was an unproduced design drawing the existence of which a Furie witness had testified to: a "drawing that was approved to use to install, the mooring line" (hereinafter referred to as "the Drawing").

Because no design drawing was produced depicting the mooring apparatus as actually installed and because no witness had testified to the existence of a drawing depicting the mooring apparatus as installed and because a witness testified the Drawing depicted a wire rope sling (in contrast to the "soft mooring line" depicted on other produced drawings pre-dating the Drawing) and was relied upon to use/install a wire rope sling, the Drawing was the subject of considerable argument and dispute.

The Furie witness who testified to seeing and having had the Drawing indicated multiple copies of the Drawing depicting a mooring arrangement (with wire rope sling) affixed to the support column of the Platform were made available at a July 2015 meeting attended by a group of people each of whom was in some way connected to Furie.

Noting that if Furie did not produce the Drawing but offered testimony referring to and/or relying upon the Drawing (knowing that CISPRI would object to its admissibility and that if, over objection, admissibility was agreed then the weight to be ascribed to the evidence would be discretionary with the arbitrator), the Ruling stated a series of examples of specific actions/efforts Furie could undertake to support admitting any such offered testimony.

On June 11, 2020, the Bankruptcy Court lifted the stay to permit CISPRI to prosecute its claims (and Furie to defend against them) in the arbitration "to final arbitration award, judgment or other resolution (including any appeals taken by any of the parties thereto)."

In August 2020 the parties agreed the "Contractual Arrangement" of the charter of the Vessel to be an underlying "CISPRI Services Uniform Time Charter Party for Off-Shore Supply and Support Services" dated January 4, 2016 ("Charterparty") together with certain specified portions of a "Spot Charter Agreement" and of a "Perseverance Spot Charter Agreement."

In September the parties agreed a new schedule for completion of discovery, submission of "dispositive motions" and hearings.

In November each party submitted a request for "dispositive" relief (submitting memoranda, affidavits and documents in support and, in turn, opposition papers).

Furie requested a ruling that CISPRI cannot obtain indemnity from Furie, a third-party non-employer, for non-pecuniary damages claimed on a non-contractual bases, i.e., those claimed by the spouse of EH.

Although CISPRI conceded that under the recently agreed Contractual Arrangement that fault or liability of Furie for the injury to EH "does not give rise to a claim for express contractual indemnity," CISPRI contended that CISPRI had a claim based upon equitable indemnity for non-pecuniary damages (loss of consortium, loss of society, etc.) by the spouse of EH said by CISPRI to be available under maritime law only against Furie (premised upon a release of non-pecuniary loss claims by CISPRI's payment of the settlement monies).

The "Conclusion and Ruling:"

Any fault or liability of Furie for the injury to [EH] 'does not give rise to a claim for express contractual indemnity,' and CISPRI may not recover indemnity in this arbitration from Furie based upon equitable/non-contractual bases.

CISPRI requested an interim award finding that Furie was negligent as a matter of law when the wire rope sling component of the mooring arrangement affixed to the Platform parted and seriously injured EH during the mooring of the Vessel.

The "Conclusion and Ruling:"

No genuine issue of fact exists that Furie did not exercise reasonable care in connection with its installation of the Mooring Apparatus which was in place on January 8, 2016, when its pendant sling wire parted and that on January 8, 2016, Furie was in breach of its duty to exercise reasonable care to any at risk of harm from the Mooring Apparatus, a foreseeable risk, and the language of paragraph 4(d) of the Charterparty does not relieve it of that duty to CISPRI/CISPRI's employees.

Issues of fact exist as whether Furie's breach caused or was a cause (proximate cause) of the injury to [EH].

In anticipation of the scheduled January 2021 virtual hearings nominatively taking place in Anchorage, the parties submitted Briefs and Proposed Findings of Fact and Conclusions of Law. At CISPRI's request a subpoena was issued for the Vessel Captain (who had been deposed) to testify. At Furie's request a subpoena was issued for two Furie witnesses located in Louisiana (who had earlier been deposed) to testify.

Thirteen witnesses provided testimony during five hearing days (four in January and one some two weeks later in February). Five of the witnesses were designated as experts. Hundreds of exhibits were received and extensive testimony was offered during the hearings and was designated by the parties from deposition testimony.

After the hearings CISPRI objected to certain deposition testimony designated by Furie; through a process of withdrawals of/agreement to certain designated testimony the designations in dispute came down to three.

CISPRI objected to Furie offering certain testimony provided by two witnesses produced as Furie "30(b)(6) party witnesses" and to Furie's offer of a particular portion of deposition testimony of the Vessel Captain (who did not comply with the Hearing subpoena and whose deposition testimony therefore was designated); the former because an offer by Furie of testimony by Furie "30 (b)(6) party witnesses" is self-serving and the latter because the genesis of that testimony by the Captain was derivative of information gathered by the U.S. Coast Guard acting "pursuant to their investigative authority."

The designated testimony of the Furie "30(b)(6) party witnesses" was Ruled to be received as Furie's Chapter 11 voluntary bankruptcy resulted in a Furie devoid of knowledgeable employees and because court rules governing admissibility are not necessarily determinative in the arbitration (noting the testimony will be accorded weight informed by the arguments against its admissibility and by testimony and exhibits received).

The objected to testimony of the Vessel Captain also was Ruled received with the weight, if any, to be given to the testimony to be informed by CISPRI's objections.

Certain exhibits associated with testimony of the three aforementioned witnesses were ruled received.

The arbitrator requested of the parties an opportunity to inspect the Mooring Apparatus (see *infra*). In March 2021 the arbitrator inspected components of the Mooring Apparatus. Given complicating factors such as covid pandemic related restrictions, travel distances and the location of the inspection, the inspection took place without the parties or counsel being present. Photographs taken were provided to counsel as was a description of at what the arbitrator looked and touched (which together were marked as an exhibit).

Post-hearing findings of fact and conclusions of law followed by post-hearing closing briefs addressing the law in the context of the facts were submitted and exchanged. End April the submissions were complete following which the parties advised briefing was complete.

The post-hearing submissions indicated that issues related to the claims for attorneys' fees and costs and for pre-judgment interest would be addressed by the parties subsequent to issuance of the Award. Citing section 30 of the SMA Rules, the arbitrator requested, instead, that the parties submit details of and argument concerning their claims for attorneys' fees and costs prior to issuance of the Award and simultaneously address any issue concerning prejudgment interest. These submissions were completed in July 2021.

Background events and circumstances surrounding installation of the mooring arrangement

The purpose of the Platform was to extract natural gas which would pass through a pipeline to shore facilities. The design and installation (completed about September 2015) of the Platform was a lengthy and complex process with Furie essentially relying upon the services of contracted for engineering, design and production companies to carry out the project, its only Platform.

A starting point for discussion of events and circumstances surrounding installation of the Platform's South facing mooring arrangement is to describe it as ultimately installed which shall be referred to as the "Mooring Apparatus," collectively the following as used on January 8, 2016:

- Padeye (affixed to the Platform support column (hereinafter Padeye")
- Chain passing through Padeye (hereinafter "Chain")
- Chain Coupling connecting the two ends of the chain (hereinafter "Coupling")
- Shackle (through the bell of which the Chain passed; hereinafter "Shackle")
- Shackle pin (hereinafter "Shackle Pin")
- Wire rope sling ("Wire Sling" or "Wire Rope Sling")
- Thimble (metal channel around which the end of the wire rope looped creating a thimble eye at the end of the Wire Sling; the Shackle Pin passed through the thimble eye; hereinafter "Thimble")
- Swage sleeve (fitting compressing the end of the wire rope (looped around the Thimble) against the wire rope thereby keeping the Thimble in place creating the thimble eye;

hereinafter "Swage") (both ends of the Wire Rope Sling had a thimble and swage forming an eye).

Furie knew and understood that the engineering companies designing/installing the Platform knew that vessels would from time to time deliver supplies, including water and fuel, to the Platform.

Jensen Naval Architects and Marine Engineers was one of the companies providing services for Furie's Platform (Crowley Solutions, Inc., also providing services for the Platform, was Jensen's client). Jensen prepared a scale drawing stamped "Preliminary Drawing;" the title block contains preprinted boxes for insertion of information including one with "DWN" and "DATE" following which in different type is "CLB" and "6/25/2015:"

DWN CLB | DATE 6/25/2015

This "Preliminary Drawing" depicts the platform (with its crane for lifting / lowering items) and a "typical supply vessel" at low tide and one at high tide (elevation views), two (North and South) padeyes on the support column (elevation and plan views), dimensional/weld details of the "mooring point padeye plate[/s]," and a shackle is depicted with its pin of passing through a hole in the vertical padeye plate so that the crown of the shackle (plane of which is parallel to the water as is the shackle pin) would move up/down.

The drawing also shows a "Soft Mooring Line Size and Type TBD [to be decided]" connected to a shackle labeled: 3" MARQUIP SHACKLE. That shackle is shown connected to the South Pad Eye on the support column elevation view. The "Soft Mooring Line Size and Type TBD" is shown running from the shackle to one of the "typical supply vessel[s]" and shows a "Pick Up Line" hanging from the working platform on top of the support platform down to vicinity of the North Pad Eye on the support column below the working platform.

That Jensen scale drawing was revised. The revised Jensen drawing is not stamped "Preliminary" and the title block contains information added below the above referenced DWN / DATE box so that the series of boxes on the drawing appear as follows:

DWN CLB | DATE 6/25/2015 CKD SH | DATE 7/2/2015 APP CLB | DATE 7/3/2015

This "checked" and "approved" Jensen drawing is largely identical to the Jensen Preliminary Drawing save for several changes/additions some of which are: 3" MARQUIP SHACKLE becomes 3" SHACKLE; the elevation height/location of the pd eyes is shown "ELEV +32'-6"; a plan view "Loading Diagram" has been added with pie-like sections showing pie-slices East/West of the support column in red color as "Do Not Load Padeye in this Direction" and pie-slices North/South of the support column in green color as "85ST SWL" (85 short tons safe working load) and four pie-slices (filling in the gaps between the East/West pie-slices and North/South pie-slices) in yellow color as "30ST SWL"; and a drawing showing 1-1/2" steel plate "Cut Parts" to be welded together to produce the North and South Pad Eyes.

A string of emails in July 2015 (ending July 11) including Jensen's Naval Architect Courtney Bradbury, Crowley Solutions's Captain N. Collar and R. Littman, Platform Construction

Manager K. Billings and Hook-up and Commissioning Inspector R. Monceaux (employed by companies for whose services contracted or sub-contracted) concerned what mooring lines might be used/purchased with email references/discussion such as "you do not want a 50' standing line . . . 150° . . . would be far better," "I would recommend . . . Quantum 12-6" circ x 150° . . .," "second option would be Quantum 8 line . . . same dimensions," "application of these lines needs to be determined so as to properly size, but here are 2 options that should cover most of the vessels in the area that may serve the rig."

Crowley obtained quotes for 150' Quantum 8 and 12 line (each about \$5,000) and July 13 passed them to K. Billing and others noting 3.5 weeks lead time. Next a string of emails including Billings, Jensen and Crowley personnel and J Christiansen of Heavy Lift at Sea, was exchanged July 24 (with subject line "Quantum 12 and 8") indicating verbal approval to purchase a 3' shackle and "the recommendations [for the Quantum lines] were for permanent mooring lines and not for grouting operations" at the Platform involving use of the vessel "Sovereign," a question as to whether the Sovereign's mooring ropes "will meet our requirements (size/length), if not then we will have to obtain;" Billings provided details of the Sovereign's lines to Monceaux, Christiansen and Furie's Lee Chenault. In a July 27 email "Quantum 12 and 8" Chenault advises "We can purchase these directly" and initiates production of a production order "for approval" and Billings then notes in an email "This would leave ropes for future use on the monopod, I would advise placing the order" following which Furie Contract manager Smith requests paperwork to draft the purchase order "for approval and issue." But then later on the 27th Smith writes to those preparing the purchase order "Hold fire on this one as it may not be required, awaiting info from engineers."

A series of July 28 emails involving Billings, Monceaux, Christiansen, Overdick's Tim Habekost and Chenault take up the grouting of the Platform monopod with Billings questioning whether "the ropes" of the Sovereign will be "sufficient" or whether the Quantum lines "at some 30K" need be ordered noting "If we can do with what we have then no need in spending [this] extra money, as drilling or production can at a later date," and Hakebost provides and discusses wire rope of 3' diameter with minimum breaking force of 467 tons into which discussion he brings the vessels Sovereign and Svenja and the grouting work to be done.

- R. Monceaux testified that at the end of July 2015 he was given an engineer-stamped drawing (the Drawing) by, he believed, Billings. Monceaux testified the Drawing was of a vessel mooring system for the Platform and showed the placement of the padeye, its height, weld detail, angles not to pull on, and diameter of a wire rope pendant with the length of the wire rope pendant to be determined and no specification for thimbles ("Putting together a sling, the best way to do it to keep it from chafing is to use these thimbles, and it's just a general practice.").
- R. Monceaux further testified that the length of the wire rope pendant was determined at a kick-off meeting for construction activities at the end of July 2015 for which he made many copies of the Drawing which he put on the table at the meeting and gave copies to an OMSI (a Cook Inlet offshore vessel support company) boat captain and port Captain, Remote Access Technology and the construction crew.
- R. Monceaux testified that the length of the wire rope pendant then was determined in conversation with a port captain for OMSI (an operator of supply boats) who advised the distance he would want a vessel to be from the Furie platform when pumping fuel. An order then

was placed for an 18-foot, 1-inch diameter wire rope sling for the Platform's South mooring arrangement which was installed in August 2015.

R. Monceaux testified that later he contacted some of those who attended the meeting in an effort to locate a copy of the Drawing but has not located the Drawing.

During Furie's initial efforts to install the wire rope pendant on the Platform, difficulties arose. The Furie daily progress report for August 12 states "Wrong shackle, send in new shackle, wrong again." Because the curved bell portion of the shackles did not fit through the hole in the vertical plate of the padeye. Monceaux testified that, after presenting to K. Billings the difficulties encountered with the "wrong" shackles they tried to fit through the Padeye, the solution adopted with Billings's input was using a chain. Furie purchased chain to attach a shackle to the Padeye; the chain was double looped through the hole in the Padeye with the chain end links connected with a coupling link (forming a double loop of chain). On August 16, 2015 the Furie Wire Rope Sling was connected to the pin of the shackle through which the chain ran, hanging off the Padeye.

Monceaux testified that he advised CISPRI's Vessel Coordinator K. Moomey the mooring arrangement was for diesel transfers only, that the U.S.C.G. required that for fuel transfers the supply boat had to be connected to the platform to be stationary to transfer diesel by hose, that he described to Moomey the size of the wire rope pendant wire and what was attached to it (and that Moomey "was good with it"). K. Moomey testified that he had no recollection of conversation/s in which Furie provided information about the mooring arrangement or about using a mooring arrangement when supplying fuel to the Platform or concerning any limitations or operational advice about use of the Platform mooring arrangement. During installation of the Platform CISPRI was not involved in any discussions about mooring vessels at the platform and did not inquire of Furie concerning the mooring arrangement at the Platform.

The "as installed" Mooring Apparatus was not designed or approved by a licensed engineer. Personnel at the platform did not have guidance regarding circumstances in which the Mooring Apparatus could be used (except that for fuel transfer it had to be used) or not used although because the Mooring Apparatus had been used from time to time before January 8 by a number of vessels (including by the Vessel when the Vessel delivered cargo and fuel to the Platform December 29, 2015) Furie did not consider its Wire Rope Sling to be unsafe.

Background and events surrounding the Vessel's use of the mooring arrangement and the parting of the Wire Rope Sling

The Vessel is 207' overall with a gross tonnage of 291 (net tonnage of 203), has a bow thruster side to side maneuvering, two diesel engines, gear driven and separately controlled, with air bladder clutches leading to two fixed pitch propellers. From the moment a throttle command is executed and the moment that command results in a propeller responding some time may pass (from forward to astern or vice versa, a longer pause - for example 6 seconds and 15 seconds were both stated – and a shorter pause from ahead/astern to neutral and vice versa, perhaps two seconds).

The bow of the Vessel had a bridle of two looped straps connected to a hook. A loudhailer mounted on the vessel house above the foredeck was available, but because of background noise if used in two-way communication mode the Vessel's Captain preferred to communicate with those on deck via hand-held radios. From the Captain's vantage point from the centerline control station in the wheelhouse, if crew members fall back closer to the wheelhouse the Captain cannot see them.

The Vessel's Captain and Chief Mate had been together during the Vessel's delivery of fuel to the Platform December 29th though as of January 8, 2016, the balance of the crew generally were new to the Vessel as crewmembers (as opposed to, for example, acting as responders to an oil spill) including EH for whom this was his first voyage serving under a mariner's credential as a crewmember (although EH previously had worked on the Vessel perhaps 25 times as a spill responder deploying equipment and running the back deck in support of spill response operations).

The Captain first went to sea in 1974 as a deckhand, obtained a Master's license 1,600 T Towing, Ocean Going and sailed as a master for years overseas (involved with pipelaying/marine construction) and in the U.S. as master of towing vessels, had served as a master on vessels similar to the Vessel and on at least one vessel operated by CISPRI prior to taking up permanent employment with CISPRI effective January 1, 2016.

On January 8, 2016, the Vessel went to the Platform to transfer cargo and to deliver water to the Platform and essentially followed the same mooring procedures as the Vessel had during the December 29, 2015, delivery.

The Vessel's Captain and Platform employee Broussard (designated an "Operator") jointly carried out a Job Safety Analysis for the cargo and water transfer operations. On board the Vessel the Captain and involved crew carried out their own Job Safety Analysis for the cargo operation which was a "free-boat operation." The Vessel maintained position while a Platform crane lifted the cargo up from the Vessel to the Platform; the operation went well and the Captain had no trouble maintaining the Vessel's position.

During the cargo operation prior to the vessel shifting to commence the water delivery, a Vessel deckhand saw the Wire Rope Sling and asked the Chief Mate why the wire looked so small referring to its diameter; the deckhand advised that when two or three feet away from the Wire Rope Sling while participating in the hook-up he could see the Mooring Apparatus and confirmed that if a crew member saw something they deemed to be unsafe the crew member had authority to stop the work. The deckhand advised he would have done so if he deemed the Mooring Apparatus unsafe; he did not "stop work" (the Chief Mate also could see the size of the Wire Rope Sling and handled it while hooking up the Mooring Apparatus and did not order "stop work.")

Following the cargo operation at the platform the Captain repositioned the Vessel for transfer of the water to the Platform having decided to use the Platform's Mooring Apparatus.

A Job Safety Analysis was conducted on board by the Vessel/Captain for the water transfer operation. A Job Safety Analysis written report is created from a form printed on the Vessel based upon the particular operation to be carried out and then the form is to be completed by those on board and signed. The Job Safety Analysis form used was not specific to a platform bow connection for water connection and did not address various particulars, for example communication between wheelhouse and deck crew or specifics concerning mooring gear. During the Job Safety Analysis the Captain advised the involved crew of the danger of tight wires, how the wires come tight, not to be around them as when a wire lets go "it's explosive," not to be in the direction of the wire and to be away from it, to get away from the bow and head aft (the Chief Mate stated "We discussed that as soon as the bridle is connected to quickly and safely move out of the way as the boat drifts back and the wire takes a strain."). The Captain did not recall stating a specific place to where the crew should move or the distance they should be away from the wire.

The Vessel's Captain's practice was to visually inspect a platform's mooring arrangement before use (and did not order stop work).

With the wind and current generally coming from the north, the Vessel approached the platform from the South. Seas were said to be about 1-3 feet (at the time of EH's injury), the winds 20 mph from the NNE with the tide said to be ebbing at 1.5 knots. Above on the Platform was Furie's Platform Operator who from that position believed the Vessel's bow was level with the South Padeye. The Captain estimated the Vessel's bow was 10-12 feet from the pad eye. On deck for hooking up to the Mooring Apparatus were the Chief Mate, EH and a second deckhand.

From a position on deck on the port side just forward of the wheelhouse the Chief Engineer observed the operation.

The connection of the Vessel to the Mooring Apparatus apparently was accomplished with two approaches: first Furie's Platform Operator, using a pick-up line, lowered the free end of the Wire Rope Sling to those on the foredeck who then attached a shackle to the thimble on the free end of the Wire Rope Sling; the second approach was for those on deck to insert the hook on the Vessel's bridle into the shackle.

The three at the foredeck lifted the Vessel's mooring bridle to the Vessel's rail and during the brief (less than a minute) time to insert the hook into the shackle on the Wire Rope Sling the Vessel more or less remained in the same position with the Captain using the engine to maintain position (to hold the Vessel's position "you've got to overcome the tide and the winds" but "if you leave it in gear [going forward], it's not going to stop" "So you put it in [gear], take it out [of gear], putting it in, taking it out, backing on the other one possibly." And "quite often" the bow thrusters as well).

From the wheelhouse the Captain saw the three men at the bow connecting up to the Mooring Apparatus and could see the Wire Rope Sling which the deck crew had to hold to make the connection.

Once the assembly dropped over the bow with slack (a "belly") remaining in the Wire Rope Sling which was outside the Vessel's bow, the Chief Mate, EH and the second deckhand turned to leave the area as the Vessel fell away moving astern.

The Captain did not recall if he communicated with a specific person of those on deck; the Chief Mate held the radio to communicate with the Captain and advised the Captain that they were hooked up and that the gear was secure. The Captain recalled telling the crew that he was going to take tension on the mooring system but did not recall if the crew responded - he could not then see the crew – and did not recall hearing the deck crew provide an all clear.

The Captain could see the Furie pendant wire and the vessel's mooring gear coming into tension and as the bridle went over the bow of the Vessel with the bridle coming up smoothly with the tension as the tide and wind pushed the Vessel back.

As the vessel was falling astern the Chief Mate, EH and the second deckhand were moving away from the bow. The Chief Mate had not arrived at the location to which he was heading when the Wire Rope Sling parted; he did not see the wire make contact with EH. The second deckhand also was moving astern when he heard a popping, turned and saw EH down and was then about as far away from the bow as was EH.

The Chief Engineer observed the operation taking place on the foredeck and watched the Chief Mate, EH and the second deck member as they began moving aft while the Vessel was moving astern with nothing, per the Chief Engineer, other than current and weather pushing the Vessel astern "when the pendant ran out of slack. It didn't appear that the bridle was excessively tight." Bower noted that the starboard leg of the vessel's mooring gear was tight and noted that if the bridle comes up tight on one side "it kind of pulls the bow over;" Bower heard "the strain of the cable" and verbalized something along the lines of "get out of there" because he believed the three men moving aft should move more quickly and were, he believed, in the snap-back zone.

The Captain did not see the wire part but heard a noise "more like a rifle shot." "It was just coming into tension and then it exploded." The Captain felt no shake or sensation on the Vessel whatsoever.

EH was on the deck with his feet toward the bow and his head was pointing toward the stern.

On the Vessel's fore deck the Chief Mate found the Wire Rope Sling and shackle still connected to the bridle hook and threw it overboard (the pick up line connected to it secured it to the Platform).

Up on the Platform, after Furie's Platform Operator had used the pick up line to lower the unconnected end of the Wire Rope Sling down to the Vessel and the Vessel was hooked up, looking down through the catwalk grating the mooring arrangement looked fine to him. The Platform Operator testified at a hearing that the vessel then was lined up with the Padeye, not pulling to one side, and that he heard engine noise, a revving of the engine and saw a little bit of

¹ The Chief Mate testified that during the Job Safety Analysis discussed was that to get out of the snap-back zone the deck crew was go aft down the side of the bow to the walkways past the anchor windlass to the walkways on either side of the vessel.

black smoke (and agreed no need existed to use the engine because current and wind would push the Vessel away from the platform) and heard noises "like a stretching noise" which he attributed to "tension happening to the straps that they were hooked to." The Platform Operator further testified that he remembered the Platform shaking tremendously which he attributed to tension and remembered a loud noise and then saw a man on the vessel's deck. The Platform Operator heard the Vessel Captain ask on the radio "What's going on down there, guys, I can't see anything;" the Platform Operator responded advising the captain that a man was down on deck and heard nothing else on the radio.

EH, a resident of Alaska, was lifted to the platform and medically evacuated with EMTs to shore, having sustained serious injury which left him, after surgeries and extensive treatment, permanently disabled physically and neurologically.

After the Incident a U.S.C.G Report of Marine Casualty was completed based upon information provided by the Captain, and the Captain and involved crew prepared and signed statements concerning the incident.

CISPRI did not have a manual or standard procedures specific to transfers of water (but did for transfers of fuel) nor for aspects which might be involved in such a transfer such as mooring the vessel to an offshore platform, ensuring location of crew when placing tension on a mooring line, a lookout; CISPRI left these matters to the discretion of the vessel captain.

A CISPRI Health and Safety Plan contained various requirements including confirmation of work and communication procedures, reporting unsafe/unsuitable work materials, staying away from taut/stretching lines due to snap-back and that a vessel operator be aware of the location of crewmembers while operating the vessel. The Captain knew CISPRI stressed safety and clear communications as a safety factor.

The Captain and crew had the authority to stop any work if any one of them had concerns about anything unsafe or about to become unsafe or about any equipment (an authority the Captain had exercised), and CISPRI stressed the existence of the stop work authority. On January 8, 2016, neither the Captain nor any of the crew on the Vessel exercised their authority to stop work.

In November 2016, CISPRI fired/dismissed the Captain concerning which an "Employer Representative Statement in the Employee Disciplinary Notice" states:

[The Captain] has consistently not demonstrated the leadership capabilities that CISPRI expects and requires from our vessel captains. There's been several occasions when [he] has not carried through with expectations regarding pre-job safety planning, incident reporting, and has ostracized and alienated his crew due to his belief of crew inadequacy and incompetence.

The General Manager of both CISPRI entities believed the Captain did not meet expectations regarding communication, planning and good communications with the crew in terms of hazards and mitigating potential risk and hazards although letting the Captain go "wasn't specific to just that one incident" involving EH on the Vessel.

Contentions of the parties

CISPRI contends that by deviating from an engineered mooring padeye design (the Jensen drawing) (which would not have failed had it been installed) without good cause or engineering approval Furie introduced the risk of imparting a bending force on the Wire Rope Sling at the Swage and that bending forces thus were imparted when the Wire Rope Sling failed, weakened the Wire Rope Sling and contributed to the failure.

CISPRI suggests that the Wire Rope Sling failed because it was overloaded in nearly pure tension although there was indication of bending contributing to the failure and that the forces imparted on the Wire Rope Sling would not have parted a larger Wire Rope Sling (or the recommended synthetic line which had a breaking strength in excess of 349,00 which would not have parted even if the Vessel was using dead-slow astern).

CISPRI argues that a properly designed and installed wire rope sling would have withstood any "shock" arguably imparted on the 1-inch Wire Rope Sling that resulted in it parting; that the same load that was sufficient to part the 1-inch Wire Rope Sling would not have parted a properly designed and sized wire rope sling that was consistent with design parameters (if the design decision was to use a wire rope sling rather than a synthetic line) to safely accommodate a vessel the size of the Vessel.

CISPRI further argues that as owner of the Platform Furie did not exercise due care to ensure its mooring arrangement was properly designed, engineered and installed and to ensure that its Platform workers understood the safe working parameters of the equipment and, having requested the Vessel to visit the Platform to deliver water, failed to provide a safe mooring arrangement for use by its invitee, CISPRI.

Referring to the Contractual Arrangement and specifically its Charterparty, CISPRI argues that Furie breached provisions concerning providing adequate slings for cargo operations, exercising due diligence to direct the Vessel to safe moorings or safe locations and providing operational plans/documents for safe operation of a vessel,

CISPRI contends that Furie's described negligence and breaches of the Charterparty were the proximate cause of and substantial factors in the injuries sustained by EH.

Furie asks that CISPRI be found liable for EH's injuries by reason of CISPRI's vicarious liability for negligence of the Captain and by reason of CISPRI's own negligence.

Furie argues the Captain was negligent in unsafely, imprudently and contrary to proper seamanship, putting the Mooring Apparatus under tension before EH was clear of the mooring line snap-back zone thereby causing EH's injury and that, in exercising the unguided / broad discretion CISPRI Services granted him, using the Mooring Apparatus which was not needed to carry out the water transfer operation (as it had not been for the cargo unloading).

Furie argues that the Captain could have rejected use of the Wire Rope Sling based upon the Captain's deposition comments that it was too short and too thin which, Furie argues, characteristics were obvious when the Captain had the Vessel use the Wire Rope Sling (Furie does acknowledge that despite the Captain's after the fact comments, the Captain had testified that from the wheelhouse he inspected the Wire Rope Sling before using it and saw nothing amiss).

Furie argues that CISPRI was negligent by failing: to have an adequate Job Safety Analysis form to use prior to transfers by hose to offshore platforms; to have written procedures or guidelines for mooring to offshore platforms or for water transfers by hose and, specifically, written procedures for clear communications between wheelhouse and the deck crew and for ensuring the deck crew is clear of a snap- back zone before tension is placed on a mooring system; to properly and adequately train the Captain and crew.

With reference to the Chartering Arrangement and specifically its Charterparty, Furie argues that by failing to provide written policies or procedures for water transfers, mooring vessels, placing a strain on a mooring system, or the use of lookouts during a mooring operation (leaving such matters to a captain's discretion), CISPRI acted inconsistently with its obligation under paragraph 4(a) to furnish to the Vessel "with all instructions and sailing directions." And Furie suggests that by putting the Mooring Apparatus in tension before ensuring that EH and others were outside the snap-back zone the Captain and CISPRI disregarded the safety of EH thereby not meeting their responsibility for a safe operation implicit under paragraph 4(d) that the "entire operation, navigation, and management of the vessel" was in the "exclusive control and command" of CISPRI and the Captain.

Furie also argues that CISPRI was at fault for hiring the Captain as CISPRI should have more carefully and thoroughly investigated his employment history and references.

Opinions of expert witnesses

CISPRI offered opinions from two expert witnesses here briefly summarized.

C. Larson, a professional engineer licensed as a civil engineer holding a B.S. degree in civil engineering and a masters's degree in structural engineering experienced in design of on shore mooring facilities including mooring systems, opined that:

- If the Jensen engineering advice as depicted in Jensen's engineering drawing had been followed and a robust synthetic mooring line used then no line would have parted on January 8, 2016.
- Based on OPTIMOOR analysis performed by BergerABAM, the Mooring Apparatus was not of sufficient strength to safely moor the Vessel under design environmental loads or the conditions of January 8, 2016.
- Analysis demonstrated that the Vessel required a stronger diameter wire rope sling (minimum) to safely moor at the Platform for annual design environmental loads or loads of January 8, 2016.

- The Wire Rope Sling was too short and too stiff, and the length and thickness of the proposed mooring line / wire rope sling should have been considered by an engineer.
- The Mooring Apparatus was not engineered to current nationally accepted industry standards and was not designed to safely moor the Vessel under normal and expected environmental conditions and loads and in accordance with widely accepted model codes for offshore mooring design loads.
- The mooring system arrangement shown on Jensen preliminary drawings would not have exerted a bending moment on the wire rope assembly. As designed, the thimble / shackle would slide around the curved closed end of the shackle in response to vessel drift, keeping the mooring line aligned and eliminating any tendency for binding and bending of the thimble.
- Had a properly designed and engineered mooring arrangement been installed at the Platform, the loads imposed on that system on January 8, 2016, would not have parted a wire rope sling.
- J. Skaggs, a metallurgical materials consultant holding a B.S. and master's degree in metallurgical and metals engineering with specific education in failure analysis and experience with wire ropes, first visually examined the Mooring Apparatus and later, with a Furie appointed expert, attended a joint destructive examination at a laboratory. J. Skaggs opined that:
 - The Wire Rope Sling failed because it was overloaded, parting in nearly pure tension, although there was some indication of bending contributing to the failure.
 - Individual wires from both the core and wrap of the Wire Rope Sling (at the break) had
 either cup-and-cone fractures, indicating nearly pure tension, or chisel-shaped ductile
 shear fractures which occur in wire rope subjected to a combination of transverse and
 axial loads.
 - The side plates of the Thimble on the monopod end of the Wire Rope Sling were bent in a manner consistent with imparted lateral forces to the mooring assembly.
 - A wire rope sling that is bent will fail at a lower load than a wire rope sling loaded in pure tension.
 - Reference materials indicate that the chisel-like shear fractures are the result of combined tension and shear loading, that is, bending. Fractures propagate in stress fields that are either tensile or shear directed. The failure propagation direction is perpendicular to the plane of maximum stress. In pure tension, which is the intended loading for wire rope, fractures mainly would be cup-and-cone fractures lying perpendicular to the axis of the wire. Introducing a side load by bending changes the direction of the plane of maximum stress and results in the chisel-shaped shear fractures that were observed alongside the cup-and-cone fractures.
 - The more bending the more shear failures (or higher ratio of such failures) and fewer cup and cone failures (or lower ratio of such failures).
 - No bending force should have existed in the mooring arrangement; the only explanation for a bending force is the deviation from an engineered connection to the padeye from which the Wire Rope Sling ran which deviation introduced the risk of an undesirable bending force in the Wire Rope Sling at the Swage when in tension.

- Because of the evidence of bending force at the time of failure, the ad hoc modification
 of the Jensen drawing padeye design played a substantial and causative role in the failure
 of the Wire Rope Sling.
- The deviation from the Jensen engineered drawing design for the mooring connection to
 the padeye introduced the risk of imparting a bending force on the Wire Rope Sling at the
 swage and, as a result, bending forces were imparted on the Wire Rope Sling at the swage
 when the Wire Rope Sling failed, weakened the Wire Rope Sling, and contributed to the
 failure.

Furie offered opinions from three expert witnesses which here are briefly summarized.

- J. McFarland, a marine surveyor from Kodiak, Alaska, is a USCG Licensed Master 1600 Ton Uninspected Vessels with experience in the maritime industry since 1966 (vessel ownership, operation and surveying) and inspected the Vessel, reviewed crew statements and depositions and related materials. J. McFarland opined:
 - Mooring line snap-back, the sudden release of energy stored in a tensioned mooring line when the mooring line parts, is a known risk in the marine industry creating risk of serious injury or death which risks are mitigated by ensuring, prior to placing tension on a mooring system, that all crew are safely outside the snap-back zone of danger.
 - EH was in the mooring system snap-back zone of danger when the Mooring Apparatus failed.
 - Visibility of the vessel's foredeck from the vessel's wheelhouse control station was incomplete.
 - During the Job Safety Analysis the Vessel's captain and crew had not specified the snapback zone of danger or identified a safe zone outside the snap-back zone of danger or how the Captain would ensure the crew were safe once the Vessel's bridle was hooked up to the Wire Rope Sling.
 - No test of the communication equipment was carried out and no lookout was posted in the wheelhouse to be the Captain's eyes as to the location of the crew.
 - No communication took place to advise/confirm that EH and the deck crew were in a safe location before tension was placed on the mooring system and the Captain did not have visual or verbal contact as to the position of the crew on deck after the mooring connection was made to ensure that the crew was safe.
 - The captain may not have had the Vessel under control, impacting his ability to check the security of the crew and whether they were safe from the zone of danger.
 - An inadequate Job Safety Analysis prior to the water transfer operation led to communication and other errors.
 - CISPRI did not have a master moorage plan to guide the captain and crew in planning for the mooring operation.
 - The Captain's failure to properly and safely manage the vessel caused EH's injury.

W. Arnoult, a consulting engineer in materials and metallurgy, holds B.S. and master's degrees in physics and a Ph.D. in materials science and has expertise in material failure analysis and

fracture analysis. He first visually examined the Mooring Apparatus and later, with the CISPRI appointed J. Skaggs, attended a joint destructive examination at a laboratory. W. Arnoult opined:

- The Wire Rope Sling parted as a result of ductile tensile overload, that is it failed when pulled beyond its capacity.
- The Wire Rope Sling at the break had cup-and-cone (can occur only when individual
 wires are straight) and shear (chisel- shaped) fractures with slightly more cup-and-cone
 fractures than shear fractures.
- Axial and shear stresses are produced when a wire is loaded solely by axial force and both cup-and-cone and shear fractures can occur, the shear fractures resulting from strands in the wire twisting around each other and combining to form helixes.
- Because of the many cup-and-cone fractures at the break in the Wire Rope Sling (slightly
 more than the number of shear fractures), the wire rope as a whole must have been
 straight, not bent, when it failed.
- Observed no bending deformation in the Wire Rope Sling which is what one first would see if the Wire Rope Sling had parted while bent.
- The channels of the Wire Rope Sling thimbles were expanded on the crest of the thimbles, the expansion (tapering off about where the middle of the shackle pin passed through the thimble) having been caused by heavy axial load causing the wire rope to flatten and individual strands to get mashed and spread out with such expansion at the crest of the thimbles further indicating a heavy loading of the entire Wire Rope Sling; such expansion can be symmetric or asymmetric as it might expand one side of the crest of the thimble more than the other side of the crest of the thimble.
- The undersides of the thimbles at each end of the Wire Rope Sling were impressed (mechanically deformed).
- At the end of the Swage where the Wire Rope Sling failed is where two parts of the wire rope merge together, a location where stresses are concentrated and stresses change rapidly from one magnitude to another; the swage collar binds the wire rope with result that within the Swage the wire rope is not able to flex and elongate as much as it can outside the Swage; a big differential in stress between wires in the Swage and wires outside the Swage causes a high stress area which, then, is a likely place for a fracture to occur.
- No evidence of corrosive attack or mechanical damage, such as permanent bends, was observed.
- J. Towers, a professional engineer licensed in Washington and Alaska as a Naval Architect and Marine Engineer, holds a Bachelor of Mechanical Science degree, is employed by a Elliott Bay Design Group ("EBDG") and has practiced as a naval architect and marine engineer since 1974. In order to carry out the two purposes for which J. Towers advised his services/those of EBDG were requested, J. Towers reviewed various documents including USCG report, Captain's statement, certain plans/drawings, NOAA historical data, etc.
- J. Powers stated the requested purposes were to estimate loads in the Mooring Apparatus when the Vessel drifted back and the Mooring Apparatus came tight and to see what would have been the effect if the Vessel had a little bit of astern way from using her engines. J. Powers testified and opined:

- J. Towers used current, wave height and wind information the Vessel's Captain included in his statement/report for the location at the time of EH's injury because J. Towers could not get weather conditions from the Platform and because the Captain is observing the conditions on site and because projected/actual data for other locations in Cook Inlet, for example current and wind, change at different locations within the Inlet.
- J. Towers calculated the combined environmental forces such as the wave height, wind and current acting on the Vessel when the Wire Rope Sling parted (the forces generally were aligned and from the north coming from ahead of the Vessel as it maneuvered on the south side of the Platform).
- These calculated combined forces were not sufficient to have caused the Wire Rope Sling to break, the combined force being 67,400 pounds, about 71% of the reported 98,000 pounds breaking strength of the Wire Rope Sling.
- From calculations of the forces on the Wire Rope Sling had the vessel's engines been operating astern in conjunction with environmental forces the conclusion was these combined forces of 105,000 pounds would have parted the Wire Rope Sling as 105,000 pounds is about 108% of the breaking strength of the Wire Rope Sling.
- Calculations were based upon an assumed height of the Padeye (on the Platform's support column) as the height of the Padeye was uncertain.
- If the bow of the Vessel generally was level with the Padeye then the calculated load on the Wire Rope Sling would have significantly reduced making the calculated forces less likely to part the Wire Rope using just environmental loads imposed on the Vessel.

CISPRI's claimed losses and damages

"Maintenance" paid to EH	35,859.17
Medical transport	10,381.23
Medical treatment	959,099.43
Advances towards settlement	132,300.00
Charges for medical bill review services	69,494.85
Fees of insurance adjustor	65,201.57
Unreimbused disability insurance	4,070.82
Unreimbursed health insurance	74,409.32
Unreimbursed CISPRI expenses	44,228.91
Total	\$1,395,045.80

Plus:

Settlement funds, a Confidential figure, included in Confidential "Appendix A"

Furie contests, partially or in their entirety the *italicized* items, the particulars of which and findings as to which are discussed *infra*.

Factual findings and conclusions

Before, during and after the hearings the parties' counsel presented their parties' claims, contentions and arguments thoroughly. Well prepared proposed findings, memoranda and briefs were submitted. The matters in dispute were hard fought in a professional manner.

Introduction

That a mooring line/wire under tension presents a risk should it or some part of the gear to which it is attached part or fail is well understood in the marine industry and is acknowledged by the parties. Each of the parties, in its own way, refers to that risk to support its contention that the other party is entirely to blame for the injuries to EH.

Findings

The Incident – general observations

The parties largely agree as to the particulars of what occurred on the deck of the Vessel. With the Chief Engineer looking on, the three men placed the hook of the Vessel's bridle onto a shackle on "their" end of the Wire Rope Sling which the Platform Operator had lowered down to them; then as the Vessel moved astern the three men were moving aft. From his position at the controls in the wheelhouse, the Vessel's Captain could not see the men when the Wire Rope Sling parted/snapped back.

Because EH apparently has no memory of what happened, EH cannot provide information as to his actions and movements and locations after the hook up and "why" at the moment the Wire Rope Sling parted EH was where he was. From the Chief Engineer we know EH was headed aft, we know EH's position after going down on the deck and have a fair idea where EH was when struck. We know EH was in a location where risk existed that the Wire Rope Sling would strike EH should the Wire Rope Sling or some part of the Mooring Apparatus part or fail, a risk specifically addressed prior to the water transfer operation during a Job Safety Analysis discussion in which EH and the others involved participated, including the Captain.

Although EH was newly working under his credentials to serve as a deckhand, previously having perhaps 25 times worked on the Vessel in connection with spill responses which would involve handling equipment / putting out equipment / retrieving equipment, EH was anything but a novice seaman. Even in the absence of the Job Safety Analysis discussion prior to the water transfer operation, difficult is to imagine that EH did not know the risk of snap back and the importance of getting away from a line under tension.

That the Job Safety Analysis discussion apparently well covered the risks as noted above and included discussion and guidance - to not be in the direction of the wire, to get away from the bow, to head aft (although perhaps not identifying a location to where to move), to safely move out of the way as the Vessel moves astern and the wire takes a strain - does not excuse the Captain's failure, in advance of the water transfer operation, to establish an arrangement by which the Captain would know that those on the foredeck were out of harm's way before the risk associated with the Mooring Apparatus and its Wire Rope Sling coming into tension occurred.

And that may be particularly so given that the Captain knew that from his usual position at the centerline controls in the wheelhouse he could not see men after they moved back from the bow but were still on deck forward of the wheelhouse. Having been at the Vessel's controls for the hook up to the Mooring Apparatus on December 29 for a transfer of fuel, a hook up operation carried out similarly to that on January 8, the Captain knew the "sight lines" and "blind spots" which he would have while hooking up January 8.

The particulars of what the Captain might have arranged (using the loud hailer in two way mode or waiting for the Chief Mate to state on the radio "All Clear" or having a lookout in the wheelhouse directly at the wheelhouse forward window to advise "all clear" or some combination of those or some other arrangement) are not as important as the failure to arrange it. Perhaps a CISPRI form or guidance or, better, a Job Safety Analysis form specifically oriented to hooking up to a mooring line/s / using mooring lines, might have alerted those participating in the Job Analysis to agree an arrangement by which the Captain would be assured the foredeck area where snap-back risk existed was clear of crew.

Even without such a pre-agreed arrangement, the Captain, who was in radio contact with the Chief Mate (who confirmed by radio to the Captain that the gear was securely hooked up) could have asked the Chief Mate if, for example, the three men were safely clear. The Captain testified he could not recall any of the deck crew telling him "All clear" and nothing indicates the Captain asked the question of anyone. In response to a question along the lines of "Before you allowed the Vessel to drift back you didn't ask the deck crew if they were in a safe position" the Captain responded "I told the crew I was going to take tension on the wire."

The Captain testified he did not use the Vessel's engines to fall back but let the tide and wind push the vessel back and that doing so does not require using the throttle because as a rule you then are not in gear. To maintain position while the deck crew was handling the bridle and bridle hook and the Wire Rope Sling to hook up, the Captain had to use the engine to counter act forces pushing the vessel both on the hull in the water and the Vessel structure above the water. The Captain did so by using the throttle/s (two throttles/two engines) engaging the gears/screw/s and unengaging and engaging and unengaging (largely for ahead power though the Captain indicated he may at times have used one engine ahead and the other astern within the engage/disengage sequences). The Captain advised he may have used the bow thruster as well. In effect, resisting external forces below and above water to maintain position of the 200+ foot Vessel involved using "whatever you can," engine to drive the screws, the rudder and the bow thruster. Understandably the Captain could not recall exactly what the sequence/use of the throttles was to maintain position given the in gear/out of gear (i.e., engage/unengaged) sequence.

Nothing indicates that anyone on board the Vessel or on the platform was alarmed by or identified or sensed any unusual movement of the Vessel, either ahead or astern. The Chief Engineer, the Chief Mate, EH and the second deck crew on the foredeck were relatively close to the 18' diameter Platform support column (that the Wire Rope Sling was 18'1" required that they be). No one said "Stop Work."

In September 2018 the Operator on the platform who was observing the Vessel below him through gratings, having a birds-eye view to observe the Vessel's motion relative to the

Platform's support column, testified that he did not remember hearing anything from the Vessel by way of maneuvering or engines, had no information that the Vessel was using power to go astern and agreed the Vessel was just falling away from the Platform.² That is consistent with what the Chief Engineer observed while standing on the foredeck: "[A]nything other than weather or current involved in the movement of the ship prior to the parting?" "No. . . . it was the weather that was pushing the boat back."). And with the Captain's testimony "To bring the wire under tension . . . you let it fall back generally" (Q. . . . the tide and wind is pushing you back? A. Certainly").

Not under power, many forces would have a role in any movement of the Vessel (some 207' length overall with 40' breadth and 17' depth): inertial forces "lingering" from any prior fore or aft movement whether having been imparted by the bow thruster or the screw/s (in gear/out of gear, etc.) or any forces external to the Vessel, wind on the structure, current, seas, eddies resulting from water passing the 18' diameter support column of the Platform, etc.

In sum, determining (or knowing) the precise location/distance to the support column, speed and direction of movement of the Vessel at the moment of/immediately after hook-up to the Mooring Apparatus, whether fore/aft or yaw or pitch, is complex; because so many variables exist an effort to do so will involve estimates of the variables.

What is known is that after the hook-up the Captain's intention was to have the Vessel fall back/move aft so as to put tension on the Mooring Apparatus and bridle; because at that time the Captain could not see those on the foredeck and did not know their location, the Captain should not then have (passively permitted or actively caused) the Vessel to move aft to cause tension in the systems between the Vessel and Platform.

Despite not knowing, as said above, exact speed and direction of movement of the Vessel, because observed was that the tension which came to be imparted on the system was seen to pull on the Vessel's bridle's starboard strap, not port strap, the centerline of the vessel was not "in line with" the Padeye.

The Vessel and Captain had used the Mooring Apparatus December 29 for a fuel transfer, and when on January 8 planning on the water transfer the Captain decided to again use the Mooring Apparatus. The requirement to be connected to the Platform for a fuel transfer (by the Platform at the least by reason of the U.S.C.G.'s requirement to do so) is to reduce risk of a spill (connecting the vessel to the Platform so it will not move "off station" which could disrupt the fuel hose causing a spill). That risk reduction measure is not without application to a water transfer albeit a water spill, though not desirable, is not an oil spill. The unloading of cargo is a different matter as the Platform cranes wire is connected (or not) to cargo on the Vessel's deck

² During January 2021 hearings the Operator offered inconsistent testimony to the effect that he heard engine revving noise and saw a puff of black smoke causing him to understand the Vessel "was getting to be tension on the wire." Given that the Vessel's engine was used to maintain position, possible is that engine revving and a puff of black smoke may have occurred in conjunction with the hooking up operation (though no other witness so testified), but the contradictory testimony of 2018 results in no weight being given to the Operator's suggestion as to when revving/smoke may have occurred.

so that moving "off station" either leaves the cargo on board unconnected to the crane or the cargo connected to the crane (off the deck).

The Platform Operator and the Captain discussed (as part of a joint Job Safety Analysis) both the cargo operation and the water transfer using the Mooring Apparatus.

The Captain looked at the Mooring Apparatus on December 29 for the fuel transfer and again January 8 prior to/during the hook-up and nothing caused him to consider it unsafe to use. The Platform Operator, who had Stop Work authority, saw no reason to not use the Mooring Apparatus and used the Platform's pick-up line to lower the "Vessel end" of the Wire Rope Sling down to the Vessel.

Based upon his January 8, 2016, observation of and December 29, 2015, use of the Mooring Apparatus, it was reasonable for the Captain to have the Vessel on January 8 use the Mooring Apparatus and Wire Rope Sling (and by observation the Captain could not reasonably be expected to know the it had insufficient breaking strength so as to be unsafe to use).

The Mooring Apparatus – general observations

No need exists to here repeat in detail the factual basis and findings contained in and supporting the January 5, 2021 Ruling (that "no genuine issue of fact exists that Furie did not exercise reasonable care in connection with its installation of the Mooring Apparatus which was in place on January 8, 2016, when its pendant sling wire parted" and that "Furie was in breach of its duty to exercise reasonable care to any at risk of harm from the Mooring Apparatus"). But because during hearings the design, preparation for and installation of the Mooring Apparatus were covered by testimony and exhibits, some discussion is warranted.

The process to design a mooring arrangement for the Platform began at least as early as June 2015. The Jensen "Preliminary Drawing" apparently was drawn as of the 25th by "CLB" (perhaps by Jensen's Courtney Bradbury). That drawing was revised by a July Jensen drawing indicating it was Checked by SH on July 2 and Approved on July 3 by CLB. Apparently calculations were made concerning loads/forces on the Padeye based upon the padeye and shackle configuration shown in the drawing (the drawing states Safe Working Loads for various angles tending off the South Padeye). Courtney Bradbury and others then exchanged emails for several days concerning what soft line of what strength and length might best be used, for example a Quantum 8 or 12 of 150'. Quotes for the lines were obtained. Later in the month Billings advises placing "the order" and Furie takes steps to do so but later the same day Furie puts the purchase order work on hold "as [this one] may not be required, awaiting further info from engineers."

A series of emails the following day concern grouting and using "ropes" from a vessel and whether Quantum lines need be ordered (with Hakebost writing about a 3" wire etc.).

Furie has not produced anyone with knowledge concerning what then led to the Drawing. Six days after the Incident (and within six months of the meeting where many copies of the Drawing were said to be available/provided at a meeting and in the hands of the various meeting attendees) CISPRI emailed a letter to Furie requesting immediate and affirmative action to preserve documents or information concerning the Wire Rope Sling – Billings (who is said to have provided the Drawing for the meeting) was alive and would remain so until months later.

With reference to the suggestions made in the May 10, 2020, Ruling concerning effort Furie could make to track down the Drawing should Furie want to relly upon testimony concerning content of the Drawing, whether efforts were undertaken is unknown. As noted in that Ruling, that Monceaux in September 2018 testified the Drawing "showed a range of slings. I believe it was between one inch and inch-and-a-quarter" (Monceaux generally settled upon and several times testified to 1") emphasizes the inexplicable failure of Furie to better explain what factors or calculations or opinions, if any, were considered and by whom in shifting away from the mooring arrangement shown on the earlier Jensen drawing/s Furie had in hand and which were produced.

Design, installation and bending forces

W. Arnoult advised that strands of the wire flattening/getting mashed and expanding would have caused the symmetric/asymmetric spreading visible at the crest of the thimble (at the Platform end of the Wire Rope Sling) and tapering off about where the middle of the shackle pin passed through the thimble. The deformation of the thimble visible on photographs is more extensive than that for which W. Arnoult offers an explanation: deformation exists below the Shackle Pin where, as opposed to the crest of the Thimble, axial loads are less) including somewhat below and lower, especially where the middle area of the Thimble is adjacent to the "foot" of the Shackle.

J. Skaggs noted that the side plates of the Thimble were bent (as is apparent in photographs and by visual observation) which he attributed to lateral/transverse forces being imparted to the Mooring Apparatus. J. Skaggs attributes those forces to Furie installing the Shackle not with the Shackle Pin passing through the hole in the Padeye (which would then permit – if the Jensen drawing depiction had been followed – the Thimble eye of the Wire Rope Sling to move through a wide range of angles along the curved crown bell of the shackle so that only axial "straight" loads would be imparted) but rather as per the as installed arrangement: the Shackle Pin through the Thimble (the crown of the Shackle having the Chain through it in turn looped twice through the hole in the Padeye) which restricted the movement of the Thimble so that lateral/transverse forces could be imparted to the Thimble and, in turn, to the Wire Rope Sling at/below the Swage (the break occurred at the Swage) (consistent with the opinion of C. Larson).

A Wire Rope Sling that is bent will fail at a lower load than one loaded axially /in pure tension - no bending force should have existed in the mooring arrangement.

The existence of lateral as opposed to purely axial forces where the break occurred at the Swage is consistent with J. Skaggs observations of the wire. Individual wires from both the core and wrap of the Wire Rope Sling (at the break) had either cup-and-cone fractures, indicating nearly pure tension, or chisel-shaped ductile shear fractures (overall he saw more cup-and-cone than shear fractures). Shear-tensile fractures can occur in wire rope in axial tension and do occur in wire rope subjected to a combination of transverse and axial loads. That J. Skaggs saw "more shear fractures [at the break] than I would normally expect to see" supports his opinion of some lateral/transverse load on the Wire Rope Sling rather than pure axial load.

That the starboard strap of the bridle, not the port, was taut when the Wire Rope Sling parted indicating the centerline of the vessel was not perpendicular to the Padeye may possibly explain

existence of some bending force on the Wire Rope Sling reducing its ability to sustain the load it would have been able to sustain had it been in pure axial tension.

The Mooring Apparatus installed was not in accord with any engineering design or calculations as to loads it could or would handle. The Padeye/Chain/Shackle/Shackle Pin/Wire Rope Sling-Thimble connections introduced bending forces. The connection depicted in the produced Jensen Drawings and (presumably) depicted (per what was said to be) in the Drawing were designed to eliminate bending forces.

Mooring Arrangement, Design and Safety

The maneuvering and movement of the Vessel did not attract particular attention from any of those on the Vessel or from the Platform Operator looking down on the Vessel, was not unusual, was not extraordinary, and was, apparently, routine and within the range of expected and usual movement/maneuvering. A sound from either the Bridle or Wire was interpreted by the Chief Engineer to indicate tension building³ but the "speed" of the Vessel did not cause alarm or concern.

That the Vessel completed a fuel transfer operation using the Mooring Apparatus on December 29, 2015, without incident in a routine way indicates something was different on January 8 but because any difference was not remarkable leads to the conclusion the "difference/s" (if any) were within what would be expected operation/movement of the Vessel.

J. Towers's calculations included certain environmental forces acting on the Vessel when the Wire Rope Sling parted at what he found to be 67,400 pounds of load, about 71% of the reported 98,000 pounds breaking strength of the Wire Rope Sling so theoretically not sufficient to have caused the Wire Rope Sling to break (i.e., assuming its strength was not degraded by other forces such as bending forces).

But J. Towers assumption of 1.5 knots of current based on what the Captain reported was out of line with others belief. For example the Chief Mate interpolated reported datum of current at station locations in the area of the Platform and found the current to be 3.4-3.5 knots and the C. Larson group 3.6 knots. The conclusion is that the 1.5 knots upon which J. Towers relied for calculations well may not correctly represent the current at the time the Vessel was hooking -up.

Other factors J. Towers assumed included estimated seconds for movement and estimated distance moved before the Mooring Apparatus tightens based on recollections of witnesses as to distance to the Platform column, estimated height of the Padeye above the water (extrapolated from drawings, photographs, etc.) creating an angle which will vary depending upon the Padeye's location/state of tide. Depending upon the variable included in the calculation some have a greater impact if altered (e.g., current) and others a lesser impact.

The conclusion is that with so many variables based on estimates, the margins between what may have caused the Mooring Rope Sling to part or to not part are not great if the assumptions of current and wave height and initial speed of the vessel falling back (for example, stern way resulting from the Captain giving a second or two of astern engine to maintain position just as the hook-up was being completed) do not reflect actual conditions/movement. For example, if the current was 3.4 knots then apparently, all other estimates of J. Towers remaining as

³ From training and experience, the Chief Mate – on the foredeck during mooring - knew the sound a wire or line makes when it may part in tension but did not hear the sound.

calculated, the Wire Rope Sling would have been subjected to pulling beyond its breaking point. J. Towers agreed that at some states of tide, for example mid-way during tidal change, a 4 knot current is somewhat predictable at the Platform which, if the Vessel then was hooking up to the Mooring Apparatus "fair to say is she would part the wire."

J. Towers agreed that in designing a mooring arrangement the designer has to take into account the anticipated actions of a vessel which it is possible would include a vessel having astern way on prior to the vessel's bridle being hooked up. J. Towers acknowledged that in designing a mooring arrangement it is assumed to be not safe to have a vessel, carrying out a routine mooring, use any more than 60% of the breaking strength of the mooring equipment; and that the J. Towers calculation he made (Vessel not using her engines) resulting in 67,400 pounds of force on the Mooring Apparatus and Wire Rope Sling, about 71% of the reported 98,000 pounds breaking strength of the Wire Rope Sling, according to industry standards would represent an unsafe condition for mooring the Vessel and that it would not be, according to industry standards, safe to undertake to moor the Vessel in circumstances of exposing the mooring equipment to 70% of its breaking strength.

The opinion of C. Larson concerning industry standards for design of mooring arrangements which include margins of safety for variables involved in use of a mooring is not dissimilar to that of J. Towers and supports a finding that the Mooring Apparatus was unsafe for the Vessel to use.

If design calculations or engineering considerations (for example, size/tonnage of vessel, wind/wave/tidal state and current conditions/weather conditions) factored into including the Wire Rope Sling in the Mooring Arrangement, then nothing has surfaced concerning them. If any did exist then Furie did not communicate their substance to its Platform personnel to guide them.

Furie used the Mooring Apparatus without having design/engineering calculations as to the extent to which the Mooring Apparatus might safely be loaded and did not provide to its Platform information or guidance as to circumstances (for example weather, vessel tonnage/size, state of tide/current, sea state) in which it was appropriate and safe to use or not use the Mooring Apparatus. And because the Wire Rope Sling is part of the Mooring Apparatus, Furie did not provide to its Platform information or guidance as to circumstances in which it was appropriate and safe to use or not use the Wire Rope Sling.

Conclusions as to CISPRI

While engaged in the process of hooking up to and falling back from the Platform and the Mooring Apparatus the maneuvering and movement of the Vessel at the Platform was not reckless, out of the ordinary, unusual or unexpected for a Vessel using the Mooring Apparatus.

Nothing indicates that any information concerning the Captain's employment history and sailing history should or would have caused CISPRI to not employ the Captain; that CISPRI did not carry more inquiry into the Captain's employment history and references was not unreasonable.

The Captain had an extensive sailing experience with established companies internationally and nationally.

CISPRI and the Captain, however, were negligent in the following respects:

The Captain failed to establish an arrangement by which the Captain would know that those on the foredeck were out of harm's way before the snap-back risk associated with the Mooring Apparatus and the Wire Rope Sling coming into tension.

In failing to establish such an arrangement the Captain failed to carry out an adequate Job Safety Analysis unreasonably putting the crew at risk to which CISPRI contributed by failing to have taken steps / established procedures to ensure such an arrangement would be established. The Captain did not know or try to confirm that those on the foredeck were out of harm's way before the snap-back risk associated with the Mooring Apparatus and the Wire Rope Sling come into tension.

At the time the Captain expressed the intention to and then did have the Vessel fall back/move aft so as to put tension on the Mooring Apparatus and bridle the Captain could not see those on the foredeck placing them at risk of being in a snap-back zone should the Mooring Apparatus and bridle go into tension more quickly than the Captain may have anticipated.

The described negligence of CISPRI itself, and as the employer of the Captain for whose negligent acts/failures to act CISPRI is vicariously liable, were a proximate cause of the injuries to EH.

Conclusions as to Furie

The arrangement/number of chisel-shaped ductile shear fractures observed at the break at the Swage evidence bending forces imparted to the Wire Rope Sling at the Swage consistent with the deformation and bending of the Thimble below the Shackle Pin. The Jensen Drawing design would have eliminated such bending forces. The only explanation for the bending forces is that Furie installed an *ad hoc* make-do solution rather than a designed / engineered connection to the Padeye. That negligence introduced the risk of an undesirable bending force in the Wire Rope Sling at the Swage when in tension reducing the load the Wire Rope Sling otherwise may have sustained which well may have contributed to the parting of the Wire Rope Sling.

But even absent the indicia of bending forces, the basic negligence of Furie is its use of a Mooring Apparatus, including the Wire Rope Sling, which Furie should have known was unsafe for the use to which Furie put it to hold the Vessel.

Because well understood in the marine industry is that a mooring line/wire under tension presents a risk should it or some part of the gear to which it is attached part or fail and that the movement a vessel trying to maintain a position over the bottom or fall back from a maintained position or taking up slack in a mooring arrangement is not (also given forces on the vessel from wind, current, waves and other environmental influences) a science, the pure breaking strength of the components of a mooring arrangement are not the basis to establish for what size vessel the mooring arrangement is safe to use. The design of a mooring arrangement should incorporate

margins/leeway beyond "breaking strength" based upon the vessels expected to use it and the environment (current, etc.) at the location where it will be used.

Furie installed and put into use a Mooring Apparatus without leeway/margin of safety for the range of usual and expected variations of vessel movement during mooring (whether due to the wind, current, sea conditions etc. or maneuvering of the Vessel to maintain position) including vessel movement to a position to hang off the Mooring Apparatus. Furie did not even understand that it was doing so because it did not have engineering drawing/s or calculations/information prepared by an engineer/naval architect - after due consideration of the circumstances of potential use including the tonnage/size of vessels - for which the Mooring Apparatus would be safe to use.

Furie was negligent in not knowing for what vessels (vessel tonnage/size) in what circumstances (state of tide/current, wind force/direction, etc.) it was safe to permit them to use its Mooring Apparatus. That negligence put Furie in the position of negligently failing to provide guidance to those on the Platform concerning when to/when to not use the Mooring Apparatus premised upon margins for safe use. In result those on Furie's Platform did not know the unsafe situation in which they might put vessels using the Mooring Apparatus, including the Vessel

That the Mooring Apparatus and its Wire Rope Sling failed in the circumstances of what the evidence indicates was a routine and unremarkable operation to hook up to the Mooring Apparatus proves the failure of Furie to have an appropriate margin of safety as part of its providing its Mooring Apparatus for use by vessels.

The negligence of Furie was a proximate cause of the injuries to EH.

The Contractual Arrangement and alleged breaches

CISPRI and Furie both point to certain clauses or phrases within the Contractual Arrangement, particularly the Charterparty, to argue that the other was in breach.

Generally speaking, the arguments are not persuasive that either party was in breach thereby causing the injuries to EH.

CISPRI argues that Furie breached provisions concerning providing adequate slings for cargo operations, exercising due diligence to direct the Vessel to safe moorings or safe locations and providing operational plans/documents for safe operation of a vessel,

Clause 6 (b) of the Charterparty refers to slings in the context of their use for loading/unloading cargo and has no application to the Wire Rope Sling of the Mooring Apparatus.

Clause 6(c) of the Charterparty requires Furie to provide to CISPRI "operational plans or documents which are necessary for the safe and efficient operation of the vessel." This concerns operation of the vessel, not of the Platform. CISPRI's position in the arbitration effectively is that during the operation to hook-up to the Mooring Apparatus the operation of vessel was safe and efficient while that of the Platform was not. Clause 6(c) does not support CISPRI's claim.

Clause 6(a) provides that Furie "shall exercise due diligence to direct the vessel to safe berths and safe locations recognizing the risks inherent with vessel operations in Cook Inlet and surrounding areas" CISPRI first argues that the location of the Platform was unsafe that suggestion is not supported.

To argue that the Mooring Apparatus was unsafe or that the Mooring Apparatus was unsafe for certain size vessels to use during, for example, strong currents and wind and waves coming out of the North, is different than "the location was unsafe."

When CISPRI entered into the Charter Arrangement on January 4, 2016, CISPRI knew that the Charter Arrangement would involve the Vessel being directed to the Platform (Furie was a member of CISPRI and the Platform was Furies's only platform) thereby agreeing to provide services at that location (with which CISPRI was already familiar including via the Vessel having delivered fuel to the Platform December 29, 2015). No breach of concerning "safe locations" occurred.

Along the lines of discussion in the May 11, 2020, Ruling, the Platform's support column with a padeye welded to it with the Mooring Apparatus hanging off it was not a "berth" as that term is used in 6(a) and as it is generally understood. No fendering, no arrangement to moor alongside, no system of mooring buoys to hold a veesel in position or any similar arrangement existed, any one of which might (depending upon all circumstances) cause a finding that a "berth" existed. Clause 6(a) does not support CISPRI's claim.

Furie argues for findings that negligence of CISPRI and of the Vessel's Captain and crew in various ways caused the injuries to EH. Furie references two clauses of the Charterparty. Furie suggests that certain negligent acts of CISPRI were inconsistent with CISPRI's obligation under paragraph 4(a) to "furnish the master with all instructions and sailing directions" because instructions specific to water transfers and putting a strain on mooring systems were not provided. Furie also suggests that CISPRI did not "meet their responsibility for a safe operation implicit under paragraph 4(d) (the "entire operation, navigation, and management of the vessel shall be under the exclusive control and command of [CISPRI], its master, officers and crew"). Furie's arguments of inconsistency are not persuasive as to breach as they stretch the language of the clauses beyond their natural meaning. Furie's arguments are and were better made within the context of claimed negligence and are treated as such.

Findings as to claimed damages

Furie does not dispute losses/damages CISPRI claims under headings Medical transport, Medical treatment, Advances towards settlement and the Settlement funds (a Confidential figure).

Furie disputes charges for medical bill review services (\$69,494.85) and fees of the insurance adjustor (\$65,201.57).

The Testimony from CISPRI's general manager was that the adjustor performed an administrative function for the underwriters.

The adjustor administered the claim by carrying out, more or less, a clerical function (which included maintaining a ledger, copies of invoices, records of payment, approvals from

underwriters, organizing/collecting funds from underwriters, etc.), and the adjustor worked with/communicated with the family of EH, was involved with various arrangement benefitting EH, etc., all of which, Furie argues, CISPRI would have had to do in connection with defending itself vis a vis EH.

Furie provides persuasive authority that in the absence of recovery based upon indemnity, CISPRI's contribution damages are limited to amounts paid by/on behalf of CISPRI to "discharge the injured person's claim of harm and the parties' joint liability to the injured party." Quoting from a Jones Act case cited by Furie: CISPRI "would have had to incur those expenses in any event to defend against the claim under the Jones Act and [EH's] maritime claim for unseaworthiness."

The fees for medical bill review services and adjustor services are not recoverable.

Furie contests CISPRI's claim for Unreimbused disability insurance (\$4,070.82) and Unreimbursed health insurance (\$74,409.32), arguing these costs were an unnecessary voluntary expense. CISPRI argues they are recoverable because they were costs which CISPRI would have incurred and paid had EH continued in CISPRI's employ from January 2016 through December 2017 (mediation/settlement) and were an advance on the eventual settlement (albeit, therefore, voluntary). The argument of CISPRI is more persuasive given the nature of the injuries, treatment carried out over the period and the inability of EH to continue to work but with settlement in the sights of the parties. The costs for Unreimbused disability insurance and Unreimbursed health insurance are deemed recoverable.

Furie argues the Unreimbursed CISPRI expenses (\$44,228.91) claim were voluntary payments and that the various amounts involved, including travel expenses incurred for EH's family to accompany EH both locally and greater distances, would not have been recoverable by EH. These expenses were demonstrated to include items which would not ordinarly be recoverable while other of them are justifiable; though Furie argues that "no medical provider mandated" that EH's family or members of it accompany him, based upon the injuries and neurological deficits resulting from the injury these expenses were, at least in part, justified. One-half of the Unreimbursed CISPRI expenses (\$22,114.46) are deemed recoverable by CISPRI.

Contribution; Comparative Fault; Apportionment – Discussion and Relative Degrees of Fault

In the absence a of finding of breach of the Contractual Arrangement/Charterparty, with regard to the CISPRI claim for Contribution the parties agree that each tortfeasor is only liable for its proportionate share of fault.

When one tortfeasor has "discharged the entire liability by paying more than his equitable share of the common liability" that tortfeasor is entitled to contribution based upon comparative fault, i.e., apportionment of damages based upon relative degrees of fault of the tortfeasors.

Furie installed the Mooring Apparatus with a "make-do" connection to the Padeye rather than in accord with an engineered arrangement which set up a situation where bending forces caused deformation of the Thimble - with all agreed that such forces reduce the strength of a wire. No engineer had a role in deciding the length of the Mooring Rope Sling or in determining and advising Furie of the strength of the Mooring Apparatus or in what circumstances of vessel size

and conditions (current, etc.) the Mooring Apparatus/Wire Rope Sling might safely be used having in mind margins of safety for use (and informative industry standards). Furie's installation of the Mooring Apparatus created an unsafe condition concerning which it was unaware. That put personnel on Furie's Platform in a situation where they did not know what vessels in what conditions might safely use the Mooring Apparatus – and negligently put at risk the safety of the Vessel's crew. The Platform personnel agreed that the Vessel use the Mooring Apparatus despite it being unsafe for the Vessel to do so. These negligent acts and failures put the Vessel in an unsafe situation in which to moor endangering those on the fore deck.

Furies' failures and negligence (and not of a momentary nature) proximately caused EH's injuries.

Not ensuring that EH was clear of harm was negligence attributable to CISPRI. That the risk of snap-back was discussed during the Job Safety Analysis was necessary and appropriate, but the failure to not have a procedure - whether by organizing a visual confirmation or by some means of verbal or other communication - was negligence for which not only the Captain but also CISPRI bears a degree of responsibility.

The negligence proximately caused the injuries to EH.

The Furie fault created an unsafe situation with the consequence that a possibility existed at any time - depending upon the vessel and conditions (current, etc.) in which the Mooring Apparatus would be used – that the Mooring Apparatus/Wire Rope Sling would fail/part causing injury.

The fault of the Captain was a failure at a particular time in a particular circumstance. Had the Mooring Apparatus/Wire Rope Sling not parted during what were not unusual or extraordinary maneuvers/movement of the Vessel and had the Captain sought or thought to confirm on the radio with the Chief Mate that everyone was clear, seemingly the mooring would have been routine.

Taking into account the findings and conclusions and considerations, the relative degree of fault attributed to CISPRI is 35% and to Furie is 65%.

Because CISPRI Services, LLC, made all payments (CISPRI advised that both CISPRI Services, LLC, and Cook Inlet Spill Prevention & Response, Inc., were named as claimant to avoid any suggestion that a necessary party was not a party to the arbitration) the Award is to CISPRI Services, LLC.

Recoverable Damages:

Maintenance paid to EH	35,859.17
Medical transport	10,381.23
Medical treatment	959,099.43
Advances towards settlement	132,300.00
Unreimbused disability insurance	4,070.82

Unreimbursed health insurance 74,409.32
Unreimbursed CISPRI expenses 22,114.46
Total \$1,238,234.43

Plus

Settlement funds, a Confidential figure, included in "Confidential Appendix A"

Interest

Prejudgment interest from January 18, 2018, to the date of this Award is awarded (see Confidential "Appendix A").

Attorneys' fees and expenses

The Charterparty (included in the Contractual Arrangement) provides at Clause 24(a):
An made pursuant to this provision [for arbitration] may include costs, including a reasonable allowance for attorneys' fees.

Section 30 of the SMA Rules (which rules govern the arbitration) provides:

The [arbitrator] is empowered to award reasonable attorneys' fees and expenses or costs incurred by a party or parties in the prosecution or defense of the case.

CISPRI is the prevailing party, and the claim of Furie for attorneys' fees and expenses is denied. CISPRI submitted memoranda and extensive exhibits in support of its claim.

Furie submitted memoranda commenting upon and taking issue with time frame in which certain legal services were rendered, necessity of the number of and involvement of lawyers and law firms and the rates charged. Furie also takes issue with aspects of the expenses which CISPRI claims, for example rates/fees and involvement of experts, work of experts said to be duplicative of work by other experts, amounts related to a fact witness and certain identified expenses apparently not attributable to this matter (and noted is that \$84,250 included in the expenses are monies which CISPRI placed in escrow with the SMA as security for fees of the arbitrator and are not considered to be part of the CISPRI claim for expenses).

CISPRI notes that preparation for the arbitration commenced early on, that the complexity of the issues and amount in controversy dictated using the services of the lawyers whose fees are included (counsel to handle issues related to Furie filing in Delaware for Chapter 11 protection and counsel experienced with maritime/SMA arbitration and the involved Charterparty). CISPRI notes that lawyer hourly rates in one instance were reduced before underwriters would agree to their involvement and that legal fees were subject to review by a legal fee adjuster prior to payment by underwriters, a process resulting in reimbursement at less than amounts for which services initially were billed. CISPRI maintains that the expenses associated with services provided were reasonable and necessary including experts who did not directly participate in the arbitration hearings.

CISPRI's submitted declaration and submissions in support of the claim for attorneys' fees and

for expenses have been considered in the light of the issues, argument and contentions Furie has raised.

Attorneys' fees

With regard to the claim for Attorneys' Fees, the amount sought is \$388,697.00 plus \$153,065.00 plus \$24,957.34 (Rosner which amount will not be considered as an expense) totaling \$566,712.34 of which amount \$510,041.10 is Awarded to CISPRI Services, LLC.

Expenses

With regard to the claim for expenses, the amount sought is \$487,973.02 from which \$84,250 (shown as SMA deposits) and \$24,957.34 (Rosner "expense" shifted to attorneys' fees) is deducted for net claim for expenses of \$378,765.68 of which \$321,950 is Awarded to CISPRI Services, LLC

The Award amount including recoverable damages (plus the confidential settlement amount), pre-judgment interest and attorneys' fees and expenses awarded to CISPRI Services, LLC are set forth in Appendix A which is incorporated into and is a part of this Final Award as if fully here set forth.

The fee of the arbitrator is set forth in Appendix B which is incorporated into and is a part of this Final Award as if fully here set forth. Although the fee of the arbitrator is to be shared by the parties 35% (CISPRI Services, LLC) / 65% (Furie Operating Alaska, LLC) the arbitrator's fee is the joint and several responsibility of Claimant CISPRI Services, LLC, and Respondent Furie Operating Alaska, LLC.

Clause 24 of the Charterparty (of the Contractual Arrangement) provides that "This Charter shall be governed by the General Maritime Law of the United States . . . and judgment may be entered upon any award made hereunder in any Court of competent jurisdiction." This Final Award may be reduced to judgment in any court of competent jurisdiction.

Dick Corwin

New York, NY August 9, 2021