

CHARTING A COURSE FOR A.I.'S BRAND OF JUSTICE IN
MARITIME DISPUTES

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I. INTRODUCTION

1. ChatGPT is a large language model that uses artificial intelligence to generate responses to prompts on various topics. Its developer, OpenAI, claims that ChatGPT has been trained with “*vast amounts of data from the internet written by humans*” up to September 2021.¹
2. Although there are other artificial intelligence large language models (“A.I. LLMs”) available such as Bing AI and Google Bard, this paper focuses on ChatGPT which is receiving the most attention at the time of writing.
3. ChatGPT has been praised for its human-like and nuanced responses since its first public release in November 2022. However, criticisms have also been leveled at ChatGPT for occasionally generating factually misleading information - which the tech community terms as “*hallucinations*”.² Despite the limitations of ChatGPT, discussions are already underway in the maritime industry to explore the possibility of utilizing ChatGPT to address customer queries on delivery times, capacity utilization, flagging risks of sanctions, and more.³ Questions have also been raised about the potential for advanced versions of ChatGPT to replace lawyers given that it was reported to have passed a University of Minnesota law school exam - albeit not with fantastic grades.⁴ The author is comforted by the general consensus (again, at the time of writing this paper) that while artificial intelligence may assist lawyers, a good lawyer made of flesh and blood who is accountable, sensitive to the needs of clients, and provides creative solutions, still remains essential (for now).⁵
4. Despite the discussions surrounding ChatGPT, the ability of A.I. LLMs in fulfilling the needs of maritime dispute resolution as an arbitrator, evaluator, umpire, or adjudicator has thus far been uncharted territory. This paper aims to explore such potential of A.I. LLMs against the objectives of dispute resolution in the maritime industry. To this end, an overview of key characteristics of dispute resolution in the maritime industry would be provided followed by an assessment of three tests conducted on the publicly available ChatGPT version 3.5. Finally, the paper would

¹OpenAI’s website with General FAQ on ChatGPT (undated)

<<https://help.openai.com/en/articles/6783457-chatgpt-general-faq>> (accessed on 30 March 2023)

²Bob Rust, “ChatGPT bot caught spreading misinformation on maritime law. Here’s how” (2 January 2023) <<https://www.tradewindsnews.com/technology/chatgpt-bot-caught-spreading-misinformation-on-maritime-law-here-s-how/2-1-1381412>> (accessed on 30 March 2023)

³DHL Freight’s Website, “ChatGPT and the Like: Artificial Intelligence in Logistics” (29 March 2023) <<https://dhl-freight-connections.com/en/trends/chatgpt-and-the-like-artificial-intelligence-in-logistics/>> (accessed on 30 March 2023); see also Pierre Aury, “ChatGPT’s limits when it comes to shipping” (28 March 2023) <<https://splash247.com/chatgpts-limits-when-it-comes-to-shipping/>> (accessed on 30 March 2023)

⁴Karen Sloan, “ChatGPT passes law school exams despite ‘mediocre’ performance” (26 January 2023) <<https://www.reuters.com/legal/transactional/chatgpt-passes-law-school-exams-despite-mediocre-performance-2023-01-25/>> (accessed on 30 March 2023)

⁵Angeline Poon, “ChatGPT - Game Changer for Knowledge Management” (March 2023) <<https://lawgazette.com.sg/practice/practice-matters/chatgpt-game-changer-for-knowledge-management/#:~:text=achieve%20comparable%20results.,ChatGPT%20Will%20Not%20Replace%20Lawyers,most%20legal%20questions%20from%20ChatGPT>> (accessed on 30 March 2023); see also Stephen Pamnani, “Will ChatGPT end up replacing Lawyers?” (23 March 2023) <<https://jobs.lawgazette.co.uk/article/will-chatgpt-end-up-replacing-lawyers->> (accessed on 30 March 2023) ;

propose further study on regulating and/or harmonizing the approaches towards AI LLMs in maritime dispute resolution.

II. THE OBJECTIVES OF MARITIME DISPUTE RESOLUTION

5. The manner at which most maritime disputes are resolved have been tailored by the needs and preferences of the industry. The author believes that there are four main objectives which contemporary maritime dispute resolution mechanisms/rules have aimed to achieve.
6. First, speed and efficiency. These are especially crucial when disputes arise over specific aspects of a larger ongoing transaction. A quick resolution aids in preserving the parties' relationship so as to ensure continued performance. Merchants therefore turned to ad hoc maritime arbitrations to avoid the delays which are historically associated with traditional judicial systems. Yet, arbitration does not completely satisfy this need for speed and efficiency. Even the most expedited procedural rules formulated by leading organizations such as the London Maritime Arbitrators Association ("LMAA"), the Society of Maritime Arbitrators of New York ("SMA") and the Singapore Chamber of Maritime Arbitration ("SCMA") contemplate at least weeks or even an entire month before an award is issued from the time of commencement of arbitration. As a result, the maritime industry continues on its search for faster options at dispute resolution.
7. Second, impartiality. This is particularly relevant to the shipping industry, which is by definition, an international business. Parties are often located in different countries and are unwilling to submit to the jurisdiction of the national 'home' courts of the opposing party. As such, a neutral forum is preferred - this forms the genesis of the maritime community's preference for arbitration. It is fundamental that arbitrators are impartial, and guidelines have been provided to ensure that standards of impartiality are maintained by arbitrators.⁶ However, in reality, how impartial can a party-appointed arbitrator really be? Such an expectation would rob the arbitrator of his /her emotions, perceptions, experience, and idiosyncrasies. The practical reality is that parties often select/nominate arbitrators based on perceptions of how 'carrier-friendly', 'cargo-friendly', 'owner-friendly', or 'charterer-friendly' they may be. Strategies are also adopted by finding the 'right strings to pull' with the arbitrator hearing the matter. Any mechanism that could possibly ensure complete impartiality will be well-received by the maritime industry.
8. Third, arbitrators equipped with the relevant and appropriate maritime specialization/expertise are desirable. Traditionally, merchants preferred to appoint decision-makers who were already familiar with their businesses and the arbitrators selected were often merchants themselves.⁷ Recently the United Kingdom Supreme Court recognized that given the relatively limited pool of specialized arbitrators in the maritime industry, an arbitrator's impartiality should not be called into question despite repeat or multiple appointment over similar subject matters.⁸ Accordingly, the desire for a decision-maker with appropriate expertise is of such importance that the maritime community accepts some level of compromise in perceptions of partiality.

⁶ For example, the LMAA Advice on Ethics; SMA Code of Ethics; SCMA Code of Ethics.

⁷ Clare Ambrose, *London Maritime Arbitration*, 4th Edition at [1.4]

⁸ *Halliburton Company v Chubb Bermuda Insurance Ltd* [2020] UKSC 48 at [43] & [44]:

9. Fourth, access to justice for even small value disputes. The costs of referring disputes to the court or to arbitration can be prohibitive. Statistics show that the average costs involved in pursuing recovery of disputed amounts of USD1million or less in administered arbitrations is at least USD120,000.⁹ Even for adhoc maritime arbitrations under expedited or small claims procedures, the fees involved are not insignificant and may deter one from seeking justice or a formal determination of disputes.¹⁰ Examples of disputes that are often not determined through a formal process include minor discrepancies in cargo quantity, short drifting events or minor deviations that appear as one of the many items in a hire statement issued by a shipowner to the time-charterers. The reality is that it is not economical to pursue justice (in the form of a formal dispute resolution process) where the size of a claim is too small - especially when the amount in dispute is lower than the costs involved in the dispute resolution process. But should justice be denied because of claim size? Any mechanism that allows access to justice regardless of claim size would be welcomed.
10. The author posits that A.I. LLMs, such as ChatGPT, have the potential to achieve these four objectives for the maritime community by serving as a decision-maker, if improvised further and done within a suitable framework in collaboration with humans.

III. PUTTING CHATGPT TO THE TEST

11. In order to assess ChatGPT's capabilities of acting as an arbitrator, it is not sufficient to simply provide a brief overview of a dispute and request a decision on the correct legal position. Instead, the dispute should be presented in a way that allows both parties to fully present their respective cases to ChatGPT.
12. To this end, the author presented various permutations of charterparty disputes, along with potential arguments that may be made by a disponent owner and charterer. The author then requested that ChatGPT issued awards based on the arguments presented.
13. These requests were initially declined by ChatGPT on the basis that it is unable or unauthorized to make legal judgments or awards. A screenshot of such a response is reproduced below:

⁹ Global Arbitration News (undated) <<https://www.globalarbitrationnews.com/comparative-chart/>> (accessed on 30 March 2023)

¹⁰ Appointment fee of USD500 under the SCMA Rules. Appointment fee of £350 under the LMAA Terms.

SMA Shortened Procedure Rules: Tribunal's fees and expenses may not exceed USD5,000 or USD6,000 if there is a counterclaim. No appointment fees stipulated under rules.

SCMA Expedited Procedure for claims not exceeding USD300,000. Tribunal's fees are capped at USD10,000 where the aggregate claims and counterclaims are up to or equal to USD 200,000. Where the aggregate claims and counterclaims are up to or equal to USD 300,000, the fees of any arbitrator shall be USD 10,000 plus 5% of the amount by which the claims exceeds USD 200,000.

LMAA Small Claim Procedure for claims not exceeding USD100,000. Tribunal fee fixed at £4,000



As an AI language model, I am not authorized to make legal judgments or awards on maritime disputes. Only qualified legal professionals, such as judges or arbitrators, have the authority to do so.



14. The author eventually managed to obtain determinations by ChatGPT when prompts were presented according to the following parameters:
 - a. First, a request is made for ChatGPT to determine a maritime dispute, with an explanation that factual circumstances leading to the dispute and submissions made by Parties would follow.
 - b. Second, undisputed facts are set out under a section titled “Facts”, including the applicable law of the contract.
 - c. Third, submissions made by each of the Parties are presented, referring to the relevant provision(s) sought to be relied on. These are set out under the sections titled “Owners’ Submissions” and Charterers’ Submissions”.
 - d. Lastly, the specific question(s) for determination are presented to ChatGPT and a request is made for reasons to be provided.
15. An analysis of the performance of ChatGPT, as the ‘Tribunal’, in making determinations on three hypothetical charterparty disputes are set out below.

A. Dispute relating to laytime

16. The first test involved a hypothetical dispute over calculation of laytime where a rate of loading is provided in the charterparty and no cargo was eventually loaded.
17. The prompt presented by the author to ChatGPT is reproduced below:

Quote

There is a dispute between Owners and Charterers that we need you to make a determination on. We will provide the factual circumstances and submissions made by Owners and Charterers below for your consideration.

Facts:

1. *Owners chartered the Vessel to Charterers under a voyage charterparty. The charterparty is governed by English law, provides for an agreed quantity of cargo of “100,000MT +/- 10% at Charterers’ option” and for loading to be done at a rate of 10,000MT per day.*
2. *The Vessel arrived at the agreed load port and tendered her notice of readiness. The notice of readiness was valid.*
3. *The Vessel waited at the load port but no cargo was presented by Charterers for loading. The voyage charterparty was terminated by mutual agreement 30 days after the notice of readiness was tendered.*

4. *Owners agree not to bring a claim for lost freight. It is not disputed that Charterers are liable for demurrage. However, the Parties do not agree on the manner of computing the allowed laytime under the Charterparty for the assessment of the quantum of demurrage payable to Owners.*

Owners' Submissions:

1. *The allowed laytime is 0 days.*
2. *Laytime is to be computed on the basis that no cargo was actually loaded.*
3. *0MT ÷ 10,000MT/day = 0 days of allowed laytime.*

Charterers' Submissions:

1. *The allowed laytime is 11 days.*
2. *An assessment should be made on the assumption that a defendant will perform the contract in the way most beneficial to himself and not in the way most beneficial to the claimant.*
3. *Hence, laytime is to be computed on the assumption that 110,000MT of Cargo was loaded (i.e. 100,000MT + 10%)*
4. *110,000MT ÷ 10,000MT/day = 11 days of allowed laytime.*

Question for your determination: What is the allowed laytime? 11 days or 0 days?

Please let us have the reasons for your decision, citing any relevant authorities that may be applicable.

Unquote

18. The following is a screenshot of the determination generated by the 'Tribunal' within 15 seconds:



Based on the facts and submissions provided, the allowed laytime is 0 days.



The computation of allowed laytime under the charterparty is a crucial factor in determining the quantum of demurrage payable to Owners by Charterers. In this case, Owners argue that no cargo was actually loaded and therefore the allowed laytime is 0 days. On the other hand, Charterers argue that laytime should be computed on the assumption that 110,000MT of cargo was loaded, and therefore the allowed laytime is 11 days.

The relevant clause in the charterparty provides for an agreed quantity of cargo of "100,000MT +/- 10% at Charterers' option" and for loading to be done at a rate of 10,000MT per day. It is clear from the facts that no cargo was presented by Charterers for loading during the laycan period, and the charterparty was terminated by mutual agreement after 30 days from the tender of notice of readiness.

In determining the allowed laytime, the courts have consistently held that the starting point is the wording of the charterparty. The clear wording of the charterparty in this case provides for an agreed quantity of cargo of "100,000MT +/- 10% at Charterers' option". It does not provide for any assumption that the Charterers will perform the contract in the way most beneficial to themselves or for the computation of laytime on the basis of a hypothetical performance by the Charterers.

Therefore, in the absence of any cargo actually loaded, the allowed laytime must be zero. Owners are entitled to demurrage for the entire laycan period, and Charterers are liable for the full amount of demurrage calculated on this basis.

In conclusion, the allowed laytime is 0 days. There are no authorities cited in this scenario that are applicable, as the determination of allowed laytime is fact-specific and governed by the wording of the charterparty.

19. On a preliminary view, the author was impressed by the response generated. Until A.I. LLMs like ChatGPT were introduced, such a level of coherence achieved by artificial intelligence would only have been the subject of science-fiction films.
20. However, without commenting on the merits of the substantive dispute, several observations may be made:
 - a. The 'Tribunal' made reference to Owners' entitlement to demurrage for the entire "*laycan period*" although no mention was made of any "*laycan period*" in the facts or submissions presented. This suggests that ChatGPT's appreciation of a set of facts and disputes is not confined only to the prompts presented but information that it may have received training on.
 - b. The 'Tribunal' preferred Owners' case that laytime is to be calculated based on the actual cargo loaded. However, the 'Tribunal' did not give any explanation as to why it rejected Charterers' argument - which is consistent with the position under English law that where a defendant has the option of performing a contract in a variety of ways, damages for breach must be assessed on the assumption that

they will perform it in the way most beneficial to their own interests and not in the way most beneficial to the claimant's interests.¹¹

- c. The 'Tribunal' did not make any reference to case law.

B. Dispute relating to hold inspection failure

21. In the previous example, it may very well have been the case that there are no authorities that the 'Tribunal' could have cited in its reasoning. In order to ascertain if the 'Tribunal' would cite available authorities or reference materials that were relevant to a dispute, a second test was formulated based the decision in London Arbitration 24/16 reported in Lloyd's Maritime Law Quarterly.
22. London Arbitration 24/16 involved a time charter where hold inspection failed at the load port, resulting in the vessel losing its berthing queue and having to wait for additional time to berth even after passing a re-inspection of its holds. It was not disputed that the vessel was off-hire from the time inspection failed until she passed on a re-inspection. The question which the tribunal had to deal with was whether a specific charterparty provision allowed the charterers to continue placing the vessel off-hire and/or claim damages for the additional time spent waiting for berth after passing re-inspection.
23. The prompt presented to the 'Tribunal' is reproduced below (quoting the identical clause that the tribunal in London Arbitration 24/16 was asked to review):

Quote

There is a dispute between Owners and Charterers that we need you to make a determination on. We will provide the factual circumstances and submissions made by Owners and Charterers below for your consideration.

Facts:

1. *Owners chartered the Vessel to Charterers under a time charterparty on the NYPE Form 19. The Charterparty is governed by English law. Clause 1 of the fixture recap states as follows:*

“HOLD CONDITION ON ARRIVAL AT 1st LOADING PORT TO BE CLEAN ... AND READY TO RECEIVE CHARTERERS' INTENDED CARGO ALL RESPECTS SUBJECT TO THE SHIPPERS SURVEYORS' INSPECTION. IF THE VESSEL FAILS SUCH SURVEY, THE VESSEL TO BE PLACED OFF-HIRE FROM TIME OF THE REJECTION UNTIL ACCEPTED IN ALL HOLDS, AND ANY EXTRA DIRECTLY-RELATED COSTS/EXPENSES/TIME THEREFROM TO BE FOR OWNERS' ACCOUNT.”

2. *The Vessel arrived at the first loading port and was due to berth immediately.*
3. *The holds failed inspection as they did not meet the required cleanliness standards.*

¹¹ The Hon Mr Justice James Edelman “McGregor on Damages” (Sweet & Maxwell 2022), 21st Edition at [10-111]

4. *The holds were eventually passed on a re-inspection 3 days later. However, due to port congestion, the Vessel had already lost its slot on the berthing queue and was only able to berth 8 days after passing the re-inspection.*
5. *Owners admit that the Vessel should be placed off-hire for a period of 3 days from the time that the holds failed the first inspection until the time that the holds were passed on a re-inspection.*
6. *On the other hand, Charterers claim that the Vessel continues to be off-hire for the 8 days that she waited to berth after passing the re-inspection, or alternatively, that Owners are liable to Charterers in damages for the time lost.*

Owners' Submissions:

1. *Under clause 1 of the fixture recap, the parties had agreed a simple period off-hire clause, by which time ceased at the time the holds failed inspection and re-commenced upon their passing the re-inspection. Any additional time lost thereafter was a loss arising directly from congestion in the port, which was a risk to be borne by the Charterers in any event. It was not "directly related" in the terms of clause 1 to the failure of the holds to pass the initial inspection.*
2. *The Vessel continues to be on hire by default and any off-hire provision (i.e. clause 1) is to be construed against Charterers.*

Charterers' Submissions:

1. *If a ship had a slot in a berthing queue, and lost that slot because her holds failed their inspection and then re-entered the queue in a later position and berthed later as a consequence, then that delay was caused by reason of the ship's holds failing, and was nothing to do with congestion.*
2. *Clause 1 does not expressly confine the loss of time to the period between failing and passing inspection.*
3. *It would be superfluous for "time" to be added to the phrase "EXTRA DIRECTLY-RELATED COSTS/EXPENSES/TIME THEREFROM TO BE FOR OWNERS' ACCOUNT" if it only meant that the Vessel should be placed off-hire in the period between failing and passing inspection. This would have already been covered by the preceding off-hire provision of the clause. Accordingly, the inference to be made is that the Parties intended for "time" to have a different meaning from the preceding provision of the clause (which already placed the Vessel off-hire between failing and passing inspection).*

Questions for your determination:

1. *Is the Vessel off-hire for the 8 days that she waited to berth after passing the re-inspection?*

2. *Alternatively, are Owners liable to Charterers in damages for the 8 days of time lost in waiting to berth after passing the re-inspection?*

Please let us have the reasons for your decision, citing any relevant authorities that may be applicable.

Unquote

24. The following is a screenshot of the determination generated by the 'Tribunal' within 30 seconds:



Based on the facts and submissions provided, my determination is as follows:



1. The Vessel is not off-hire for the 8 days that she waited to berth after passing the re-inspection.
2. Owners are not liable to Charterers in damages for the 8 days of time lost in waiting to berth after passing the re-inspection.

Reasoning:

Clause 1 of the fixture recap provides a clear off-hire provision in case the Vessel fails the shippers' survey at the first loading port. The clause states that the Vessel is to be placed off-hire from the time of the rejection until accepted in all holds, and any extra directly-related costs/expenses/time therefrom are to be for Owners' account. It is undisputed that the holds failed inspection and were eventually passed on a re-inspection after 3 days. Therefore, the Vessel should be placed off-hire for the 3-day period from the time that the holds failed the first inspection until the time that the holds were passed on a re-inspection.

The main point of contention is whether the Vessel continues to be off-hire for the 8 days that she waited to berth after passing the re-inspection, or whether Owners are liable to Charterers in damages for the time lost.

Owners' submissions correctly argue that the off-hire provision in clause 1 is a simple period off-hire clause, by which time ceased at the time the holds failed inspection and recommenced upon their passing the re-inspection. Any additional time lost thereafter was a loss arising directly from congestion in the port, which was a risk to be borne by the Charterers in any event. It was not "directly related" in the terms of clause 1 to the failure of the holds to pass the initial inspection.

Charterers' submissions argue that the delay in berthing was caused by the Vessel's holds failing inspection and re-entering the queue in a later position, which was nothing to do with congestion. However, this argument overlooks the fact that the delay was a result of the combination of the Vessel failing inspection and port congestion. It is not disputed that there was congestion at the port, which prevented the Vessel from berthing immediately after passing the re-inspection. Therefore, the delay was not solely caused by the Vessel's holds failing inspection, but rather by a combination of factors, including port congestion.

Furthermore, Charterers' submissions argue that "time" should have a different meaning from the preceding provision of the clause, which already placed the Vessel off-hire between failing and passing inspection. However, this argument overlooks the fact that the phrase "EXTRA DIRECTLY-RELATED COSTS/EXPENSES/TIME THEREFROM TO BE FOR OWNERS' ACCOUNT" is linked to the Vessel being off-hire from the time of the rejection until accepted in all holds. Therefore, the phrase "time" in this context should be interpreted as referring to the off-hire period between failing and passing inspection.

In conclusion, the Vessel is not off-hire for the 8 days that she waited to berth after passing the re-inspection, and Owners are not liable to Charterers in damages for the time lost. The off-hire provision in clause 1 applies only to the period between failing and passing inspection, and any additional time lost thereafter is a risk to be borne by the Charterers in any event.

25. Without commenting on the merits of the substantive dispute, several observations may be made:
- a. The ‘Tribunal’ did not simply prefer one party’s submissions over the other.
 - b. The reasoning given based on its own analysis (that was not explicitly raised by either party) is that:
 - i. The delay was caused by “*a combination*” of Vessel failing inspection and port congestion.
 - ii. The relevant clause only covered loss of time that was directly related to the inspection failure.
 - iii. “*TIME*” in “*EXTRA DIRECTLY-RELATED COSTS/EXPEBSES/TIME THEREFROM TO BE FOR OWNERS’ ACCOUNT*” is linked to the time period between failing inspection and passing re-inspection.
 - c. The ‘Tribunal’ reached a different conclusion from the tribunal in London Arbitration 24/16 where the Owners were found to be responsible for the berthing delays after passing re-inspection.
 - d. Although the reported decision in London Arbitration 24/16 is not a binding precedent, a human arbitrator who is well-acquainted with such disputes would probably have attempted to distinguish it. However, the ‘Tribunal’ did not cite London Arbitration 24/16 nor attempted to distinguish it. In fact, not a single authority was cited.

C. Dispute relating to redelivery in-lieu of hold cleaning

26. A third test was conducted to evaluate whether the ‘Tribunal’ could make associations between similar terms that relate to the same subject matter. The purpose was to determine whether the ‘Tribunal’ was able to consider the context of a dispute.
27. To this end, a dispute over an in-lieu of hold cleaning (“ILOHC”) clause¹² was formulated for the test. Two rounds of prompts in relation to the same dispute were presented which contained a variation of terms used to describe the lack of cleanliness of holds at the time of redelivery of a vessel. The first round of prompts referred to the term “*contamination*” to describe the state of the holds, and the second round of prompts adopted the word un-“*clean*” - as used in the ILOHC clause. The aim of this was to see if the ‘Tribunal’ would produce the same result in both prompts.
28. Another feature of the test was to explore how the ‘Tribunal’ would deal with situations falling within the literal wording of an ILOHC clause but which result in manifestly unfair outcomes.
29. The differences in both prompts presented to the ‘Tribunal’ are set out below. Deletions are marked by strike-outs and additions are underlined.

¹² Such clauses usually allow a time-charterer to redeliver a vessel to the disponent owner in lieu of hold cleaning on payment of an agreed sum.

Quote

There is a dispute between Owners and Charterers that we need you to make a determination on. We will provide the factual circumstances and submissions made by Owners and Charterers below for your consideration.

Facts:

- 1. Charterers chartered a vessel from Owners for the carriage of cargo. The Charterparty is governed by English law.*
- 2. Hire was agreed at USD7,000 per day.*
- 3. Clause 1 of the Charterparty states that "Charterers' option to redeliver without cleaning against one day of hire paid to Owners"*
- 4. ~~The constituents of the cargo eventually contaminated the vessel's holds and~~As a result of the residue left by the cargo, the holds were in an unclean condition and Charterers redelivered the Vessel by paying one day of hire.*
- 5. However, ~~the contaminant had to be cleaned~~cleaning had to be done by external contractors using special solvents and equipment. The Vessel had to be cleaned for a total of 200 days before she could be fixed for her next employment. Substantial expenses and losses were suffered by Owners in removing the contaminant in cleaning the holds.*

Owners' Submissions:

- 1. Charterers are under an implied obligation under the Charterparty to indemnify Owners for any loss, damage, or liability incurred as a consequence of complying with their orders as to employment of the Vessel.*
- 2. Charterers are liable to compensate Owners for all reasonable expenses incurred and losses suffered as a result of the unclean holds ~~the contamination of the holds by the cargo.~~*
- 3. Clause 1 of the Charterparty should be construed against Charterers as it seeks to limit Charterers' liability.*
- 4. Clause 1 of the Charterparty should be read as providing Charterers with a contractual right to redeliver the Vessel even when the holds are not in clean condition and that such contractual right is exercised on condition of payment of 1 day hire by Charterers.*
- 5. Clause 1 of the Charterparty should not be extended such as to entitle Charterers to limit their liability to the payment of 1 day hire ~~when substantial amount of time and expenses have to be incurred to rectify a contamination of the holds which cannot be removed by ordinary cleaning methods and which require substantial time and money~~when ordinary cleaning methods cannot be used and substantial amount of*

time and expenses over the course of 200 days had to be incurred to clean the holds.

Charterers' Submissions:

- 1. Charterers are entitled to pay one day of hire at USD7,000 to Owners in lieu of cleaning pursuant to Clause 1 of the Charterparty.*
- 2. The clear wording of Clause 1 of the Charterparty should be given effect to.*
- 3. Owners are not allowed to seek recovery of any other losses.*



Question for your determination: Are Charterers entitled to limit their liability for ~~contamination~~ cleaning of the holds to one day of hire at USD7,000?

Please let us have the reasons for your decision, citing any relevant authorities that may be applicable.

Unquote

30. The following is a screenshot of the determination generated by the 'Tribunal' in response to the first prompt within 20 seconds:



Based on the facts and submissions presented, it is my determination that Charterers are not entitled to limit their liability for contamination of the holds to one day of hire at USD7,000.  

My reasoning is as follows:

1. The clear wording of Clause 1 of the Charterparty states that Charterers have the option to redeliver the vessel without cleaning the holds, but it does not explicitly limit their liability for any resulting damage or expense. Therefore, the clause cannot be interpreted as a complete limitation of liability.
2. The implied obligation on Charterers to indemnify Owners for any loss, damage or liability incurred as a consequence of complying with their orders as to employment of the vessel also supports the view that Charterers cannot limit their liability to one day of hire. This obligation arises from the general principles of English contract law, as well as the specific terms of the Charterparty.
3. The principle of *contra proferentem*, which states that any ambiguity or uncertainty in a contractual provision should be construed against the party who put forward the clause, does not necessarily apply in this case, as the wording of Clause 1 is clear and unambiguous.
4. The decision in *The Imvros (No. 2)* [1999] 1 Lloyd's Rep 848, is relevant to this case. In that case, it was held that the charterer was liable for the costs of cleaning the holds after a cargo of molasses had leaked and contaminated the vessel. The charterparty in that case contained a similar clause to Clause 1 in this case, which allowed the charterer to redeliver the vessel without cleaning, but did not limit their liability for any resulting damage or expense.
5. It is therefore my determination that Charterers are liable to compensate Owners for all reasonable expenses incurred and losses suffered as a result of the contamination of the holds by the cargo, and are not entitled to limit their liability to one day of hire at USD7,000.

In conclusion, while Clause 1 of the Charterparty provides Charterers with the option to redeliver the vessel without cleaning the holds, it does not limit their liability for any resulting damage or expense. Therefore, Charterers are liable to compensate Owners for all reasonable expenses incurred and losses suffered as a result of the contamination of the holds by the cargo.

31. The following is a screenshot of the determination generated by the 'Tribunal' in response to the amended prompt within 20 seconds:



Based on the facts and submissions provided, I would determine that Charterers are not entitled to limit their liability for cleaning of the holds to one day of hire at USD7,000.



Firstly, while Clause 1 of the Charterparty provides Charterers with an option to redeliver the vessel without cleaning by paying one day's hire, this clause should not be interpreted in a way that would enable Charterers to limit their liability for all losses incurred by Owners as a result of the dirty holds. The clause should be read in context, and its meaning should be considered in light of the purpose and nature of the Charterparty as a whole.

Secondly, the principle of indemnity would imply that Charterers are liable for any losses suffered by Owners as a result of complying with their orders as to the employment of the vessel. In this case, the cleaning expenses and losses suffered by Owners due to the dirty condition of the holds are a direct consequence of the Charterers' employment of the vessel, and as such, Charterers should be liable to compensate Owners for these losses.

Thirdly, while the language of the Charterparty is clear in that Charterers have the option to redeliver the vessel without cleaning by paying one day's hire, this clause should not be interpreted in a way that would exclude Owners from recovering any other losses incurred due to the dirty holds. This is because clauses that seek to limit liability should be construed narrowly and in a manner that is consistent with the rest of the contract and the relevant legal principles.

Therefore, Charterers should be held liable for all reasonable expenses incurred and losses suffered by Owners as a result of the dirty holds, beyond the one day's hire payment provided for in Clause 1 of the Charterparty. Owners are entitled to recover their losses from Charterers in accordance with the principles of indemnity and the terms of the Charterparty.

In support of this determination, the case of *The "Super Servant Two"* [1990] 1 Lloyd's Rep. 1 is relevant. In that case, it was held that the owners were entitled to recover from the charterers the costs of cleaning the vessel's tanks, even though the charterers had exercised their option to redeliver the vessel without cleaning. This decision supports the principle that clauses that seek to limit liability should be narrowly construed, and that charterers should be liable for any losses incurred as a result of their orders under the Charterparty.

32. Without commenting on the merits of the substantive dispute, several observations may be made:
- a. The same conclusion was reached in both instances and the 'Tribunal' was able to associate contamination with unclean holds.

- b. However, while the ‘Tribunal’ demonstrated its ability to recite general propositions of the law, little/no explanation is given as to how they applied to the facts.
- c. There is no indication whatsoever that the ‘Tribunal’ considered the context, in particular, whether it would be unjust/unfair for an excessive 200days of cleaning time to fall within the scope of the ILOHC clause.
- d. There is some clear “hallucination” by the ‘Tribunal’:
 - i. *The Imvros (No.2)* [1999] 1 Lloyd’s Rep 848 cited by the ‘Tribunal’ is non-existent. Although *The Imvros* [1999] 1 Lloyd’s Rep 848 is a reported decision, it involved a shipment of sawn timber - not “*a cargo of molasses*” as fabricated by the ‘Tribunal’. Neither did the case concern any contamination / cargo residue left in holds. It simply did not stand for the purported proposition cited by the ‘Tribunal’.
 - ii. *The Super Servant Two* [1990] 1 Lloyd’s Rep 1 also did not stand for the proposition cited.

IV. EVALUATION

- 33. This short study alone cannot be taken as a complete evaluation of ChatGPT’s abilities - and it is not possible to do so within the limits of this paper.
- 34. However, on a preliminary review, it does appear that ChatGPT is able to fulfill at least 3 out of 4 of the stated objectives in Section II above.
 - a. Speed and efficiency - The ‘Tribunal’ clearly excelled in this area. Every determination was generated by the ‘Tribunal’ within seconds.
 - b. Impartiality - In conducting the study, no contemplation was necessary as to which arbitrator was to be appointed. No consideration was given as to the background and experience of the ‘Tribunal’ or that submissions may risk antagonizing the ‘Tribunal’ . There was no indication whatsoever that the ‘Tribunal’ was ‘Owner-friendly’ or ‘Charterer-friendly’. Instead, the ‘Tribunal’ remained ‘friendly’ to both parties and did not display any temperament. The author was also not chastised by this ‘Tribunal’ in any way during any of the tests - which may tend to happen to lawyers who appear before human arbitral tribunals or national courts.
 - c. Costs- The author did not spend a dime obtaining the determinations (apart from the costs of electricity in accessing ChatGPT on a personal computer). ChatGPT version 3.5 was free for public use at the time of writing.¹³
- 35. As to the desire for a decision-maker with specialized knowledge who makes commercial decisions, the answer is not entirely clear. The ‘Tribunal’ did not demonstrate any knowledge of maritime business nor provide correct information on case authorities. Nevertheless, this may not be an insurmountable problem if OpenAI feeds ChatGPT with data on industry practices and/or legal research resources such as entire online libraries from LexisNexis, i-law, Westlaw, etc.

¹³ However, the author understands that there are paid subscription-only versions developed by OpenAI with other special functions.

36. Further considerations on the suitability of ChatGPT to determine maritime disputes, as well as prospects of regulation and harmonization, are set out below:
- (a) Data limitation / “Hallucinations” - A potential criticism is that ChatGPT’s limited data and possibility of communicating misinformation prevents it from being suitable to determine maritime disputes. However, this is also the case for human arbitrators who are susceptible to errors and restricted by their own level of legal, technical, or maritime expertise. The only difference is that when presented with a dispute, a human arbitrator can engage in his/her own investigation to gather more information to aid decision-making. On the other hand, ChatGPT cannot make an assessment that goes beyond the data that it was trained on. While ChatGPT can receive further training from its developer, it may not have real-time access to the internet or recent developments in the law or maritime industry. It makes up for this by delivering decisions at a much faster speed than humanly possible. The speed of decision-making allows for quicker resolution of disputes, leading to increased efficiency and cost savings for all parties involved. That said, a potential safeguard that could be considered is an automatic right of appeal so that decisions made by ChatGPT can be reviewed and challenged if necessary. Further study is warranted on whether such appeals should be brought to a human arbitral tribunal, national courts or to the courts of popular jurisdictions to resolve maritime disputes (i.e. England, New York, Singapore, Hong Kong). One reference point that may be helpful is UNCITRAL’s present work on a “*Highly Expedited Arbitration*” model which envisages quick determinations being made by a neutral specialist on technical disputes, with the option for parties to refer the dispute subsequently to arbitral review.¹⁴
 - (b) Possibility of incomplete or incomprehensive reasons for decisions - Although human arbitrators typically provide detailed reasoning for their decisions, ChatGPT’s decision-making process may not be as transparent. No reasons may be provided as to why a submission was rejected or if consideration was given to such submissions. This could raise concerns over the lack of natural justice and procedural fairness which may affect the enforceability of determinations made by ChatGPT. A possible solution is to establish standard forms/regulations that waive the parties’ right to challenge ChatGPT’s decision on such grounds in exchange for an automatic right of appeal (as discussed in the preceding subparagraph).
 - (c) Unclear if decisions are based on legal merit - This should not be objectionable as it is contemplated that even human arbitrators can make decisions *ex aequo et bono*, or *amiable compositeur* (i.e. without consideration of any applicable law but based on conscience and notions of what is right) if the parties authorize the tribunal to do so.¹⁵ It is also commonplace for parties to choose to settle disputes in such manner having regard to non-legal commercial considerations in order to protect ongoing relationships. There is little reason why there should be concerns over the lack of ability to apply law accurately given that parties who agree for an A.I. LLM such as ChatGPT to decide their dispute would have already accepted its inherent limitations.

¹⁴ United Nations Commission on International Trade Law Working Group II (Dispute Settlement) Seventy-seventh session, 2022 (A/CN.9/WG.II/WP.231)

¹⁵ Article 28(3) of the United Nations Commission on International Trade Law (“UNCITRAL”) Model Law

- (d) Passivity - At the time of writing, ChatGPT is a passive system that relies on parties to present their respective cases through submissions. It cannot adopt an inquisitorial or proactive approach in investigating other provisions of the relevant contract or the parties' correspondence. Although this may be similar to the adversarial system of justice in common law jurisdictions, it may not be compatible with the inquisitorial approach prevalent in civil law systems. However, this may not be a concern of most players in the maritime industry, given the continuing popularity of arbitration in London. On the contrary, the inability to make a finding outside the scope of matters referred to it for determination may prove to be beneficial as this would have otherwise rendered a traditional arbitral award liable to be set aside under certain arbitration rules.¹⁶
- (e) Inability to assess evidence, in particular, witness credibility - The shipping industry relies heavily on contracts and agreements, such as bills of lading, shipbuilding contracts, and charterparties. The performance of these contracts is often documented through various records and reports, leaving little room for witness testimony. Even when witness testimony is required, parties commonly tender them in the form of witness statements or expert reports. Tribunals then make decisions based on those documents instead of having to hear oral testimony. Consequently, maritime disputes are often resolved based on documents alone, which is a more cost-effective and efficient method of resolving disputes than arranging for witness testimony. Organizations such as the LMAA and SCMA even have small claims procedures where arbitrations proceed on a documents-only basis by default. In fact, statistics by the LMAA indicate that an overwhelming estimate of 95% of London maritime arbitrations proceed on a documents-only basis.¹⁷ Therefore, the inability of ChatGPT to assess witness evidence should not be a barrier to its use as a decision-maker, especially in the maritime industry where documents-only arbitrations are the norm.
- (f) Practical administration and integrity of submissions - At the time of writing, ChatGPT is a single-user platform where only one user can input prompts. If one party enters prompts on behalf of the other party(ies) to a dispute, questions could be raised about the fairness of the process and whether there was any attempt to manipulate ChatGPT's responses. The party responsible for entering the prompts may also conduct trial runs with ChatGPT and attempt to amend their submissions to generate favorable outcomes. To address these issues, further study is required on whether it is appropriate to designate an administrator to handle the submission of prompts on behalf of all parties. Alternatively, further study could be undertaken on the development of an application/software which can collaborate with ChatGPT, allowing multiple users to enter prompts and producing a consolidated prompt for ChatGPT to determine. The determination generated by ChatGPT could then be circulated to all parties involved. Consideration may also be given to standardizing the format of prompts so as to ensure fairness of the process.
- (g) Possible influence of ChatGPT's developers over outcomes - One potential concern is the use of training data fed to ChatGPT to manipulate decision-

¹⁶ For eg, under Art 34(2)(a)(iii) of the UNCITRAL Model Law.

¹⁷ It is reported by the LMAA that in 2021, out of an estimated 1,657 references, only 77 awards were made after hearings. LMAA, "London Maritime Arbitration rides out the pandemic" (11 March 2022) <<https://www.maritimelondon.com/news/lmaa-releases-2022-statistics>>(accessed on 30 March 2023)

making. The data used to train A.I. LLMs such as ChatGPT are proprietary information owned by their developers, and there is little transparency regarding its exact contents. However, if ChatGPT is recognized as a dispute resolution mechanism, there may be little incentive for OpenAI to do so as it would only discourage the use of ChatGPT as a reliable tool for making impartial determinations. In any event, an additional safeguard worth studying is an automatic right of appeal (discussed in sub-paragraph (a) above).

(h) Publication and precedential value of decisions - It is noted that in New York, maritime arbitral decisions are published. However, the continuing popularity of maritime arbitration in London suggests that the growth of precedents is not the primary concern of the maritime community at the time of writing.

V. CONCLUSION

37. A.I. LLMs such as ChatGPT appear to satisfy some key objectives of maritime dispute resolution processes. However, whether the maritime industry is receptive to its use remains a question at large.
38. If A.I. LLMs ever surface as accepted decision-makers in maritime disputes, the author believes that regulation is essential. The first step may be to incorporate the appropriate frameworks into standard forms designed by BIMCO. However, it needs to be appreciated that these forms, while popular, are still not used globally. It is also not always practical for parties to discuss dispute resolution mechanisms before entering into commercial relationships when such clauses are often one of the last to be considered.¹⁸ This is particularly so in some cultures where any discussion of potential disputes may be interpreted as foreshadowing their occurrence, potentially damaging the business relationship between the parties before it even starts.
39. It is recommended that further research be conducted to explore the capabilities and limitations of A.I. LLMs such as ChatGPT. This would aid in developing a framework for the effective utilization of A.I. LLMs, as well as identifying and mitigating potential risks associated with their use as decision-makers in maritime disputes. The author suggests that the Comité Maritime International ("CMI") could take the initiative in facilitating this research for the benefit of the international maritime community.

¹⁸ Eva Litina, "Theory, Law and Practice of Maritime Arbitration: The Case of International Contracts for the Carriage of Goods by Sea" (Kluwer Law International, 2020), p. 49