

**UNITED STATES COURT OF APPEALS
FOR THE SECOND CIRCUIT**

August Term, 2006

(Argued: December 21, 2006

Decided: July 6, 2007)

Docket Nos. 06-0591-cv(L), 06-0675-cv(con), 06-0789-cv(con), 06-0790-cv(con)

OTAL INVESTMENTS LIMITED, as Owner of the M/V Kariba, for Exoneration from or
Limitation of Liability,

Plaintiff-Third-Party-Plaintiff-Appellant,

UNITED SERVICES AUTOMOBILE ASSOCIATION, ASI AUTO SHIPMENT GmbH, TED
L. RAUSCH CO., CHARLES BROOMFIELD, MORGAN MOON, PATRICIA YORK,
AUGUSTA ASSICURAZIONI S.p.A., CHN ITALIA S.p.A., CNH TRADE N.V., NEW
HOLLAND NORTH, INC., FEDEX TRADE NETWORKS TRANSPORT AND
BROKERAGE, INC., O & K ORENSTEIN & KOPPEL A.G., CASE CORPORATION AND
TOWER GROUP INTERNATIONAL, ZURICH INSURANCE CO., ALPINA INSURANCE
CO., GERLING INSURANCE CO., as subrogee and/or assignee of Schempp-Hirth Flugzeug-
Vertriebs-GmbH, DAVID GREEN HILL, LIEBHERR-WERK NENZIG GmbH, LIEBHERR-
MISCHTEKNIK, LCT LIEBHERR CONCRETE TECHNOLOGIE, LIEBHERR AMERICA,
INC., E.H. HARMS GmbH & CO., BMW OF NORTH AMERICA LLC,

Claimants-Appellants,

-v.-

M.V. CLARY, MINERAL SHIPPING CO. PRIVATE LTD., MST MINERALIEN
SCHIFFFAHRT SPEDITION UND TRANSPORT, CLARY SHIPPING PTE LTD.,
WALLENIUS WILHEMSEN LINES AS, WILH. WILHEMSEN ASA, ACTINOR CAR
CARRIER I AS CAPITAL BANK PUBLIC LIMITED COMPANY,

Third-Party-Defendants-Appellees,

M/V TRICOLOR,

Consolidated Defendant,

N.V. FORTIS CORPORATE INSURANCE,

Claimants.

BEFORE:

HON. JON O. NEWMAN,
HON. PETER W. HALL,

Circuit Judges.

HON. DORA L. IRIZARRY¹,

District Judge.

Appeal from an order of the United States District Court for the Southern District of New York (Baer, J.) finding the M/V Kariba to be exclusively at fault for a collision that resulted in the loss of the M/V Tricolor and its cargo. We reverse and remand. Judge Newman concurs in the judgment and opinion of the Court and files a separate concurring opinion in which Judges Hall and Irizarry join.

John D. Kimball, Healy & Baillie, LLP, 61 Broadway, New York, NY *for Plaintiff-Third-Party-Plaintiff-Appellant.*

Raymond P. Hayden, Hill, Rivkins & Hayden, LLP (John Eric Olson and Kipp C. Leland *on the brief*), 45 Broadway, New York, NY *for Claimants-Appellants.*

Chester D. Hooper, Holland & Knight, LLP (James T. Shirley and Francesca Morris *on the brief*), 195 Broadway, New York, NY *for Third-Party-Defendants-Appellees.*

¹ The Honorable Dora L. Irizarry, United States District Court for the Eastern District of New York, sitting by designation.

Lawrence G. Cohen, Vandevanter Black, LLP (Edward James Powers *on the brief*), 500 World Trade Center, Norfolk, VA *for Third-Party-Defendants-Appellees*.

HALL, *Circuit Judge*:

The owner of the vessel the M/V Kariba, and owners of cargo on the M/V Tricolor, appeal from a judgment of the United States District Court for the Southern District of New York (Baer, J.). The district court found the M/V Kariba solely liable for a collision off the coast of Dunkerque, France. We reverse and remand.

I. Background

A. The Collision

Before dawn on December 14, 2002, three vessels, the M/V Kariba (the “Kariba”), the M/V Tricolor (the “Tricolor”) and the M/V Clary (the “Clary”) were navigating a Traffic Separation Scheme (“TSS”) in international waters north of Dunkerque, France (generally known as the English Channel). At the relevant point of the TSS, two branches intersect at approximately right angles, one branch cutting roughly North-South, the other roughly East-West. On the night in question, the fog was thick and visibility was low. The Kariba was proceeding westward at about 16 knots. The Tricolor was also proceeding westward at 17.9 knots, one-half mile to the starboard aft of the Kariba, and in the process of gradually overtaking her. At the same time, the Clary was moving northward, along the intersecting branch of the TSS, at 13 knots, on a collision course with the Kariba.

Noticing that it was on a collision course, the Clary planned to turn starboard and steer astern of the Kariba. Before the Clary began to turn, however, the Kariba initiated its own evasive maneuver. The Kariba, seeking to avoid a collision with the Clary—and perhaps unaware of the proximity of the Tricolor—made an abrupt turn to starboard. The Kariba struck the port side of the Tricolor, rending the Tricolor’s hull below its bridge. The Tricolor along with its cargo then sank.² There were no human casualties.

In the quarter-hour leading up to the collision, none of the vessels sounded its foghorn or communicated with any other vessel via radio.

B. The Collision from the Perspective of the Three Different Ships

1. Onboard the Kariba

The Kariba is a 175.75 meters-long Bahamian flagged container ship, built in 1982, with a carrying capacity of about 1200 standard containers. Having left port in Antwerp, Belgium, the Kariba was bound for Le Havre, France, and travelling westward in the East-West Branch of the TSS. There were three men present on the bridge at the time of the collision: Captain Kamola, making his first restricted-visibility voyage as a Master; Second Officer Szymanski; and Able-Bodied Seaman Ignacio. The bridge featured an Automatic Radar Plotting Aid (“ARPA”), described as a computer system that “automatically tracks and plots target vessels and calculates their courses and speeds,” thus predicting the “closest point of approach” of other vessels.

Captain Kamola first noticed the Clary on his radar at 1:55 a.m. At 2:00 a.m., upon making a planned adjustment to his course by rounding a point called the Fairy South Buoy,

² We include in an appendix to this opinion a depiction of the positions of the vessel in the moments leading up to the collision.

Captain Kamola noticed he might be headed for a collision with the Clary. Captain Kamola did not act, however, because he expected the Clary to steer astern of him. At 2:04 a.m., when his ARPA would have shown he was approximately 3.5 miles³ and eight minutes away from colliding with the Clary, Captain Kamola asked Syzmanski to go onto the port wing of the ship and to check for the Clary's lights. After looking for approximately two minutes, Syzmanski did not see anything. At this point, the Kariba was 2.8 miles away from a collision with the Clary.

By 2:09 a.m., Captain Kamola's radar still indicated the Clary had not changed course. Concerned about a collision, and now only 2.0 miles away from a collision with the Clary, Captain Kamola ordered a 10 degree turn to starboard (registered on the Dunkerque radar at 2:09:45 a.m.). Fifteen or 20 seconds later, Captain Kamola ordered another 20 degree turn to starboard. Seconds later, Captain Kamola saw the lights of the Tricolor and ordered the rudder full to starboard. It was too late, however; Kamola exclaimed, "Oh my God, we will hit them." Within the next minute or so, the Kariba's bow struck the Tricolor broadside. The Tricolor listed hard, capsized and sank.

2. Onboard the Tricolor

Built in 1987, the Tricolor was a 190 meters-long roll-on roll-off Norwegian flagged carrier, with a capacity to carry over 3,000 cars. On the day of the collision, the Tricolor was on a voyage from Zeebrugge, Belgium to Southampton, England, and headed westward in the East-

³ These distances are taken from a computer simulation of the collision based on data collected by radar in Dunkerque, France. A compact disk ("CD"), showing the positions and movements of the three ships, was presented at trial by the Clary's expert, Captain Boyce, and is agreed by all parties to closely reflect the occurrences of the night in question. The CD permits plotting alternative courses and speeds and reveals the consequences of various combinations of actions.

West branch of the TSS. There were three men on the bridge of the Tricolor: Captain Knutsen, Second Officer Cabanda and Able-Bodied Seaman Matel.

After 2:00 a.m., Captain Knutsen was aware of the Kariba, as well as two other ships, ahead of him. At 2:12 a.m., Captain Knutsen noticed he was beginning to overtake the Kariba—and indeed, could see her lights. Knutsen was also aware of the Clary and its being on a collision course with the Kariba. Then suddenly, Captain Knutsen noticed the Kariba had abruptly and without warning turned to starboard, and was heading straight for him. In the moments leading up to the collision, Captain Knutsen had the Tricolor on autopilot. Seeking to avoid the collision, Captain Knutsen and Cabanda simultaneously converged on the wheel, hurriedly disengaged the autopilot and sent the vessel hard to starboard. Despite their efforts, the Kariba struck the Tricolor, which listed hard, capsized and sank.

3. Onboard the Clary

The Clary, a 138.5 meters-long Singaporean flagged bulk carrier, was built in 1979. On the day of the collision, the Clary had been on a voyage from Savannah, Georgia to the Netherlands. In the moments leading up to the collision, there was only one man on the bridge: Second Officer Tonic. While the Clary's bridge did not include an ARPA system, it did have a device that calculated closest points of approach, but only for vessels selected by Tonic.

By 2:00 a.m., Second Officer Tonic noticed the Tricolor and the Kariba on his radar. By 2:02 a.m., if Tonic had plotted the point of possible collision, he would have noticed that only 3.1 miles separated the Clary from the point of collision with the Kariba. At 2:11:15 a.m., Tonic decided it was time to make his starboard turn in order to pass astern the Kariba and the Tricolor, as suggested by basic navigational rules. According to the findings of the district court,

Tonic then “moved away from his radar, plotted his position on the chart table,” then disengaged his autopilot and made a “dramatic” turn to starboard. In making his turn “dramatic,” Tonic had sought to ensure the maneuver would register on the radars of other ships. In their brief and at oral argument, counsel for the Clary stated an appropriately dramatic turn would be 50 or 55 degrees in magnitude. By the time the Clary turned to starboard, had the Kariba been able to maintain its westward course, the two ships would have been only about two miles apart while both were on a collision course. Two minutes later, Tonic heard “collision, collision, collision” on his VHF radio. Realizing the blips representing the Kariba and the Tricolor had coalesced and ceased to move, Tonic readjusted his course to sail northward, west of the collided ships. Tonic did not answer the distress call.

Tonic later explained he thought the ships had only “kissed.” After passing through the area of the collision, Tonic erased his chart. At trial, Tonic admitted that “someone” had altered the Clary’s logbook pages so as to reflect that conditions were clear, and that there were two other men on deck at the time of the collision—an Able Bodied Seaman at the wheel, and a lookout.

C. The Procedural Posture

In June 2003, Otal Investments, Ltd., the owner of the Kariba (hereinafter, Otal and the Kariba together will be called the “Kariba”), filed a complaint in the Southern District of New York “seeking Exoneration from or Limitation of Liability.” *See* 46 U.S.C. App. § 183 et seq., replaced by 46 U.S.C. § 30505, et seq., and Fed. R. Civ. P. Supplemental Admiralty Rule F. In response to this complaint, numerous claimants filed claims against the Kariba, seeking damages for the loss of their cargo, which had sunk along with the Tricolor (hereinafter, the claimants will

be called the “cargo owners”). Meanwhile, the Kariba impleaded the Clary and the Tricolor as third-party defendants.

The Kariba and the cargo owners settled their disputes before trial, and the Tricolor agreed to resolve its disputes against the Kariba in Belgium. For the district court, this left only the disputes between the Kariba and the cargo owners, on the one side, and the Clary and the Tricolor, on the other. After a bench trial, the court ruled in favor of the Clary and the Tricolor, finding the Kariba to have been the sole cause of the collision. *See In re Otal Investments Ltd.*, No. 03-4304, 2006 Dist. LEXIS 5293 at *1 (S.D.N.Y. January 9, 2006).

Both the Kariba and the cargo owners appealed from this judgment, seeking a reversal of the district court’s determination that the Kariba was solely liable. The Clary and the Tricolor seek to preserve that decision.

II. Discussion

A. The Applicability of the Rule in *The Pennsylvania*

All parties agree the substantive law governing this case derives from treaties ratified by the vessels’ flag states. Specifically, the navigational duties are contained in The International Regulations for Preventing Collisions at Sea, Oct. 20, 1972, 28 U.S.T. 3459, codified by Congress at 33 U.S.C. § 1602, et seq. (the “COLREGS”). In addition, the parties have stipulated their claims should be adjudicated “in accordance with” the Brussels Convention for the Unification of Certain Rules of Law with respect to Collisions between Vessels, 1910 (the “1910 Collision Convention”). *See In re Otal Investments Ltd.*, No. 03-4304, 2005 U.S. Dist. LEXIS 21580 (S.D.N.Y. Sept. 29, 2005). Of course, while these treaties govern the substantive law, the

law of the forum—federal maritime law—governs procedural law. *The Mandu*, 102 F.2d 459, 463 (2d Cir. 1939); *In re Seiriki Kisen Kaisha*, 629 F. Supp. 1374, 1394 (S.D.N.Y. 1986).

Appellants the Kariba and cargo owners argue this procedural law includes the rule in *The Pennsylvania*. The rule in *The Pennsylvania*, 86 U.S. 125 (1874), is the subject of much debate. In its original form, it stated:

when . . . a ship at the time of a collision is in actual violation of a statutory rule intended to prevent collisions, it is no more than a reasonable presumption that the fault, if not the sole cause, was at least a contributory cause of the disaster. In such a case the burden rests upon the ship of showing not merely that her fault might not have been one of the causes, or that it probably was not, but that it could not have been.

Id. at 136. In other words, the rule operates in a manner reminiscent of negligence per se; it establishes a presumption based on a statutory duty of care. Unlike negligence per se, however, the rule in *The Pennsylvania* creates a presumption only as to causation, and not as to “fault” or negligence. See George Rutherglen, Not with a Bang But a Whimper: Collisions, Comparative Fault and the Rule of *The Pennsylvania*, 67 Tul. L. Rev. 733, 736 (1993). Originally, the rule in *The Pennsylvania* stated quite a harsh presumption, requiring the party against whom the presumption operated to show their wrongdoing “could not have been” the cause. *The Pennsylvania*, 86 U.S. at 136. But since then, our Circuit has interpreted the presumption more permissively; now, a party must prove its wrongdoing “could not have been” the cause within the bounds of “reasonable probability.” *The Mabel*, 35 F.2d 731, 732 (2d Cir. 1929); *The Aakre*, 122 F.2d 469, 474 (2d Cir. 1941); Nicholas J. Healy & Joseph C. Sweeney, *The Law of Marine Collision* 47-48 (1998). Widely criticized, the rule in *The Pennsylvania* appears to be, today, rejected by all maritime states other than the United States. See Marsden on Collisions at Sea 53

(13th ed. 2003) (“It is submitted that the critics of the *Pennsylvania* Rule are correct, and that it should be abrogated, either by the Supreme Court or by an act of Congress.”); Craig Allen, Farwell’s Rules of the Nautical Road 37 (8th ed. 2005); Michael Ben-Jacob, The Pennsylvania Rule: Murky Waters Revisited, 19 Cardozo L. Rev. 1779, 1812-21 (1998); Rutherglen, 67 Tul. L. Rev. at 735; William Tetley, The Pennsylvania Rule—An Anachronism? The Pennsylvania Judgment—An Error?, 13 Journal of Maritime Law & Comm. 127 (1982).

The district court found the rule in *The Pennsylvania* did not apply in this case. “Generally,” the court held, “United States courts will apply the 1910 Collision Convention when a collision occurs in international waters between vessels that fly flags of signatory states.” *In re Otal Investments, Ltd.*, 2005 U.S. Dist. LEXIS 21580 at *6. Article 6 of that Convention states “[a]ll legal presumptions of fault in regard to liability for collision are abolished.” If the rule in *The Pennsylvania* is substantive, the court noted, Article 6 of the Convention would override it. *Id.* at *8. Relying on the Ninth Circuit’s decision in *Ishizaki Kisen Co. v. United States*, 510 F.2d 875, 881 (9th Cir. 1975), the district court held that because the rule in *The Pennsylvania* “is outcome determinative,” it must be substantive. *In re Otal Investments, Ltd.*, 2005 U.S. Dist. LEXIS 21580 at *9; *cf. In Re G & G Shipping Co.*, 767 F. Supp. 398, 405-06 (D.P.R. 1991). Because it is substantive, the rule cannot apply in a case where the 1910 Collision Convention governs. *In re Otal Investments, Ltd.*, 2005 U.S. Dist. LEXIS 21580 at *9.

We agree the rule in *The Pennsylvania* is not a mere procedural rule; it is, instead, substantive. The question of whether a rule is procedural or substantive depends on its effect at trial. “The forum will apply its own local law in determining which party has the burden of going forward with the evidence . . . unless the primary purpose of the relevant [foreign] rule . . .

is to affect decision of the issue rather than to regulate the conduct of the trial.” Restatement (Second) of Conflict of Laws, § 134 (1971). Under the rule in *The Pennsylvania*, a vessel that violates a navigational rule not only must show that her fault did not cause the collision, but also must persuade the court that her own explanation of the collision is correct. *Ishizaki Kisen*, 510 F.2d at 880 (citations omitted). This is an imposing burden. It does not serve simply to determine who moves forward with the evidence, or to narrowly regulate the conduct at trial. To the contrary, the rule in *The Pennsylvania* is so significant as to substantially “affect the decision of the issue” of liability in a collision. Moreover, the purpose of the rule in *The Pennsylvania* extends beyond regulating evidentiary burdens at trial. As its author, Justice Strong, proclaimed, the rule “is necessary to enforce obedience to the mandate of the statute,” *The Pennsylvania*, 86 U.S. at 136, an aim that exceeds mere evidentiary concerns.

Although it escaped the attention of the district court and the parties to this case, one of our precedents suggests our Circuit may have adopted the view that the rule in *The Pennsylvania* is a procedural rule. In *The Aakre*, 122 F.2d at 469, we determined whether a Norwegian vessel stranded itself on Cheney Island in Canada as the result of unseaworthiness or navigational error. Ultimately, our decision rested on the strength of the standard of review; we decided that none of the district court’s factual determinations was clearly erroneous, and the vessel was seaworthy. *Id.* at 474. In arriving at this conclusion, we stated that questions surrounding the rule in *The Pennsylvania*, “in so far as they need affect this case, are easily settled.” *Id.* “Indeed, however *The Pennsylvania* rule was originally stated, the history of its application shows that it has done no more than shift the burden of proof with regard to causality.” *Id.* But we believe *The Aakre* does not control here simply because that panel’s statements concerning *The Pennsylvania*

constituted obiter dicta. Moreover, these dicta largely concern the force of the presumption—and not the distinct, though related, question of whether the rule is procedural. Thus, *The Aakre* does not detain us. We hold that under our modern conflict of laws jurisprudence, the rule in *The Pennsylvania* is a substantive, not procedural, rule.

Appellants cargo owners urge that even if the rule in *The Pennsylvania* is substantive, it still should apply because the 1910 Collision Convention only abolished presumptions of “fault” and not presumptions of “causation.” This argument must fail. If the Convention did refer only to fault, and not causative fault, appellants cargo owners argument still would lack traction. The parties to this case have agreed that various international instruments contain the substantive law in this case. If the rule in *The Pennsylvania* is substantive, then appellants cannot succeed by showing the 1910 Collision Convention does not abolish the rule in *The Pennsylvania*. Rather, appellants must show one of the instruments affirmatively embraces the rule in *The Pennsylvania*. This, appellants have not done. Thus the district court did not err in declining to apply the rule in *The Pennsylvania*.⁴

⁴ In any case, appellants incorrectly read Article 6. The English version of the 1910 Collision Convention appears to use “fault” in two different senses of the term. While for our purposes, exact linguistic exegesis is unnecessary, suffice it to say that in some provisions of the Convention, “fault” appears to mean “causative fault,” e.g., Article 4, a term of art encompassing fault to which liability attaches. But in other provisions, e.g., Article 3, “fault,” appears to mean “error or defect . . . of conduct,” Black’s Law Dictionary 641 (8th ed. 2004), quite apart from the matter of causation.

This ambivalence is resolved, however, by reference to the coeval French version of the Convention; in that document, Article 6 states: “Il n’y a point de présomptions légales de faute quant à la responsabilité de l’abordage” (emphasis added). In spite of the English version of the Convention, a more accurate translation would read: “There shall be no [legal] presumptions of fault in regard to liability for collision.” See, e.g., *Ishizaki Kisen*, 510 F.2d at 882; accord 4 Benedict on Admiralty, § 620 at 246-5 (1940); Healy & Sweeney at 51-52 n.38. The limiting language “in regard to liability” (“quant à la responsabilité”) plainly refers to causative fault.

B. Violation of the COLREGS

Having concluded the district court correctly declined to apply the rule in *The Pennsylvania*, we now must consider whether the district court erred in finding the “collision was the sole and exclusive fault of the Kariba.” *Otal*, 2006 U.S. Dist. LEXIS 5293 at *35. The relevant navigational duties are contained in the COLREGS, a treaty ratified by the flag states of all vessels-parties.⁵ We affirm the district court’s findings to the extent they determine that the Kariba was responsible for the collision. We reverse, however, the findings that determined that the Kariba was *solely* responsible, as well as the finding that the Tricolor and the Clary bore no responsibility for the collision.

1. The Kariba

We begin by noting that the Kariba concedes it was at fault, but maintains that its fault was not the sole cause of the collision. We agree with both contentions. With regard to the Kariba’s violations, we conclude the district court correctly assessed the Kariba’s actions as violating COLREGS 19(e) and 19(d) on avoiding collision and abaft-the-beam turns. We affirm the district court’s determination that special circumstances did not inhere; further, contrary to appellant Kariba’s assertions, the district court did not apply COLREG 15 in its findings of liability.

⁵ As noted above, the COLREGS, Oct. 20, 1972, 28 U.S.T. 3459 were codified by Congress at 33 U.S.C. § 1602, et seq. In this case, we consider the COLREGS as an international instrument, and not necessarily as a treaty adopted by Congress. We nevertheless note the detailed legislative history memorialized at H.R. Rep. No. 95-447 (1977), *reprinted in* 1977 U.S.C.C.A.N. 509.

a. Cautious Navigation

COLREG 19(e) requires vessels in conditions of restricted visibility to slow down or “take all her way off and in any event navigate with extreme caution until danger of collision is over.” 33 U.S.C. foll. § 1602 R. 19(e). Instead of turning abruptly to starboard, the *Kariba* should have slowed down until the danger of collision had passed. *Otal*, 2006 U.S. Dist. LEXIS 5293 at *23. The district court’s gloss on Rule 19(e) is correct as a matter of law; and its underlying factual determinations are not clearly erroneous.

b. Avoiding Action

The district court also determined the *Kariba* violated COLREG 19(d)(ii), which states: “[I]f a close-quarters situation is developing and/or a risk of collision exists,” then a vessel must avoid the collision, taking care not to steer “toward a vessel abeam or abaft the beam.” 33 U.S.C. foll. § 1602 R. 19(d). The district court found the *Kariba* had steered directly into a vessel abaft its beam in violation of COLREG 19(d). *Otal*, 2006 U.S. Dist. LEXIS 51 at *24. The district court correctly interpreted Rule 19(d), and its underlying factual determinations are not clearly erroneous.

c. Special Circumstances

At trial, the *Kariba* attempted to justify its otherwise illegal abaft-the-beam turn by appealing to COLREG 2(b) on “special circumstances.” COLREG 2(b) states: “In construing and complying with these Rules due regard shall be had to . . . any special circumstances, including limitations of the vessels involved, which may make a departure from these Rules necessary to avoid immediate danger.” 33 U.S.C. foll. § 1602 R. 2. The district court rejected the *Kariba*’s defense, noting it is not at all unusual or “special” for three ships to pass the

junction of a TSS simultaneously. Moreover, the danger was not “immediate” insofar as several minutes separated the Kariba from the expected collision. The district court did not err in applying COLREG 2(b), and its underlying factual findings are not clearly erroneous.

d. The Applicability of COLREG 15

Appellants cargo owners insist the district court erroneously applied COLREG 15 as between the Kariba and the Clary. COLREG 15 provides that when two vessels “are crossing so as to involve risk of collision, the vessel which has the other on her own starboard side shall keep out of the way” 33 U.S.C. foll. § 1602 R. 15. This COLREG only applies to “vessels in sight of one another.” 33 U.S.C. foll. § 1602 R. 11. At one point in its opinion, the district court stated: “At trial, the testimony of every witness underscored the belief that the Clary, as the give-way ship in this crossing situation, was obligated to turn starboard.” *Otal*, 2006 U.S. Dist. LEXIS 5293 at *26. The court’s reference to “the give-way” ship, the cargo owners argue, reveals that it erroneously applied COLREG 15 in substance, if not in name. This argument lacks merit. The district court did not apply COLREG 15; rather, the district court’s opinion, read as a whole, makes clear that the court understood the Clary’s obligation to turn starboard derived from COLREG 19(d).

e. Conclusion

We affirm the district court in its findings of liability with respect to the Kariba.

2. The Tricolor

We conclude the district court misinterpreted COLREGS 13 and 16 on overtaking, and COLREG 6 on safe speed. We clarify those rules and hold that, as a matter of law, the Tricolor violated the rules on both overtaking and safe speed.

a. *Overtaking and Overtaken Vessels*

COLREG 13 states: “[A]ny vessel overtaking any other shall keep out of the way of the vessel being overtaken.” 33 U.S.C. foll. § 1602 R. 13. A related rule, COLREG 16, states: “Every vessel which is directed to keep out of the way of another vessel shall, so far as possible, take early and substantial action to keep well clear.” 33 U.S.C. foll. § 1602 R. 16. As the district court acknowledged, an overtaken vessel may “make predictable adjustments in course and speed necessary for safe navigation.” *Otal*, 2006 U.S. Dist. LEXIS 5293 at *28.

Some courts have suggested that the overtaking vessel not only must avoid predictable adjustments, but all adjustments, predictable or not. A district court in the Fifth Circuit typified the latter absolutist approach when it held that a “leading vessel is under no obligation to keep out of the way.” *Bockenheim Unterweser Reedereibeteiligungs Schiffahrtsges, MBH v. M/V Voyager*, 495 F. Supp. 521, 525 (E.D. La. 1980) (construing the Pilot Rules for the Western Rivers, 33 U.S.C. § 301 *et seq.*, currently codified as part of the Inland Navigational Rules, 33 U.S.C. § 2001 *et seq.*). Indeed, that court continued, “[t]he overtaking vessel takes the risk of necessary alteration of course or checking of speed by the leading vessel to avoid a third vessel or stopping to let another vessel pass.” *Id.* We reject this absolutist approach. Under COLREGS 13 and 16, an overtaking vessel has a duty to maintain such a distance from the overtaken vessel so as to allow the overtaken vessel to conduct reasonably predictable adjustments. *The Iran Torab*, 2 Lloyd’s Rep. 38 (1988); Marsden 258.

We note further that Rule 13 does not govern only the conduct of vessels in an overtaking situation. It also governs the very choice to overtake. Specifically, Rule 13 obliges an overtaking vessel to select a safe place to overtake another vessel in the first instance. Healy &

Sweeney 177; *In Re Tug Ocean Queen, Inc.*, 398 F. Supp. 1062, 1067 (S.D.N.Y. 1974) (finding “because of the strong tide and the sharp bend in the [Hell Gate, New York] channel, it was unsafe to attempt to overtake”). Whether or not it is safe to attempt to overtake under COLREG 13 depends on contextual factors, including visibility, sea conditions, the space that confines the overtaking and overtaken vessels, the vessels’ speed and the vessels’ capabilities.

In this case, the district court found the Tricolor did not violate COLREGS 13 and 16 in overtaking the Kariba when positioned “.4 to .5 miles” off its starboard aft. In analyzing the overtaking situation, the district court determined the overtaking vessel only needed to keep clear of the overtaken vessel’s predictable adjustments. To this extent, the district court correctly interpreted COLREGS 13 and 16. The district court erred, however, in failing to consider whether the Tricolor breached its COLREGS 13 and 16 duties in attempting to overtake the Kariba in the first place or at least, in not adjusting its speed and course as it proceeded with the overtaking. Here, the Tricolor first became aware of the Kariba at 2:00 a.m. and at 2:12 a.m. the Tricolor’s Captain noticed he was beginning to overtake her. At this point, the Tricolor did not slow down but instead attempted to overtake the Kariba in a fog, at 17.9 knots, in a heavily trafficked TSS, with the knowledge the Kariba was on a collision course with a northbound vessel, the Clary. We deem this a strikingly precarious situation: attempting to overtake without slowing or altering course in anticipation of adjustments that the overtaken vessel reasonably could be expected to make in response to a third approaching vessel. We hold that as a matter of law, the Tricolor violated COLREGS 13 and 16 in attempting to overtake under these conditions.

b. *Safe Speed*

COLREG 6 states: “Every vessel shall at all times proceed at a safe speed so that she can take proper and effective action to avoid collision and be stopped within a distance appropriate to the prevailing circumstances and conditions.” 33 U.S.C. foll. § 1602 R. 6. Rule 19(b) restates this same rule in the context of restricted visibility conditions: “Every vessel shall proceed at a safe speed adapted to the prevailing circumstances and conditions of restricted visibility.” *Id.* Traveling at a safe speed is not just the fiat of COLREGS 6 and 19(b); it is also a matter of good seamanship. *The Nordic Ferry*, 2 Lloyd’s Rep. 591, 596 (1991); Marsden, 6-170.

Whether a speed is “safe” depends on the circumstances. In determining safe speed, a vessel must take into account various factors, including “visibility,” 6(a)(i), and “traffic density,” 6(a)(ii), as well as vessels’ capabilities, 6(a)(iii), sea conditions, 6(a)(v), and draught relative to total depth, 6(a)(vi). Among other things, vessels with radar must consider “the number, location and movement of vessels detected by radar.” 6(b)(v). Traditionally, courts often analyzed the question of speed largely as a function of stopping distance. *See Union Oil Co. v. The San Jacinto*, 409 U.S. 140 (1972) (endorsing circumstantial application of the “half-distance” rule, which requires ships to travel at a speed permitting them to stop within half the distance the lookout could see ahead); *The Cherokee*, 45 F.2d 150, 151 (2d Cir. 1930) (asking a ship to travel “at such speed that she could stop within the [full] distance that she could see ahead”). The conjunctive formulation—“avoid collision *and* be stopped”—of COLREG 6 suggests the COLREGS have preserved this emphasis on stopping distance. Marsden, 6-171. Healy & Sweeney even suggest that under the COLREGS, courts must always apply the half-distance rule: “[T]o be considered ‘safe,’ the vessel’s speed should generally be sufficiently slow to enable her

to stop within half the limit of visibility.” Healy & Sweeney at 117. But the better view holds that safe speed does not depend on stopping distance alone, but on the peculiar circumstances of every case. To be sure, stopping distance is a major factor for considering whether a speed was safe; and in considering the factor of stopping distance, a court might usefully consult the half-distance rule for frame of reference. Ultimately, however, a court also must consider the full range of other factors, including visibility, sea conditions, traffic and the vessels’ capabilities in determining whether a vessel has violated COLREGS 6 and 19(b) on safe speed.

In this case, the district court misinterpreted COLREGS 6 and 19(b) on safe speed. The district court held that the Tricolor’s speed was not unsafe because it was overtaking the Kariba at a “fairly low relative speed of 1.9 knots.” *Otal*, 2006 U.S. Dist. LEXIS 5293 at *15. In reducing the question to one of relative speed only, the district court failed to consider the absolute speed of the Tricolor, as well as all the relevant surrounding circumstances, such as visibility, traffic and stopping distance. In this case, the district court found the Tricolor chose to overtake the Kariba, .4 to .5 miles to its starboard, at the speed of 17.9 knots. The Tricolor did this under conditions of heavy fog, in a TSS known for its traffic congestion, with the knowledge the Kariba was on a collision course with the Clary. The district court did not enter findings on the appropriate speed under the half-distance rule. Nevertheless, we hold that as a matter of law, the Tricolor’s speed under these conditions constituted a violation of COLREGS 6 and 19(b).

d. Conclusion

The district court erred in its determination of the Tricolor’s liability. The Tricolor violated COLREGS 13 and 16 on overtaking, and COLREGS 6 and 19(b) on safe speed.

3. The Clary

We affirm the district court's determination that the Clary violated COLREG 5 on proper lookout. The district court erred, however, in its interpretation and application of COLREG 19(d) on avoiding action. Further, the district court erred in failing to apply an important presumption regarding the unexplained alteration of logbooks.

a. Proper Lookout

COLREG 5 states: "Every vessel shall at all times maintain a proper look-out by sight and hearing as well as by all available means appropriate in the prevailing circumstances and conditions so as to make a full appraisal of the situation and of the risk of collision." 33 U.S.C. foll. § 1602 R. 5. COLREG 2(a), concerning the "ordinary practice of seamen" encompasses this same command. 33 U.S.C. foll. 30 § 1602 R. 2; Marsden 6-25. The district court held that the Clary violated both of these COLREGS in staffing its bridge with a lone mariner. *Otal*, 2006 U.S. Dist. LEXIS 5293 at *29. The district court correctly interpreted COLREG 5 and its factual determinations are not clearly erroneous.

b. Avoiding Action

COLREG 19(d) requires a vessel not in sight of another, upon entering "close-quarters" or realizing a "risk of collision," to "take avoiding action in ample time" 33 U.S.C. foll. § 1602 R. 19. The Ninth Circuit has held that for "large, ocean going vessels, objective estimates" of close-quarters "range from two miles . . . to almost five miles." *Alkmeon Naviera, S.A. v. M/V "Marina L"*, 633 F.2d 789, 795 n.10 (9th Cir. 1980); *see also Socony Vacuum Transp. Co. v. Gypsum Packet Co.*, 153 F.2d 773, 775-76 (2d Cir. 1946); *Hellenic Lines, Ltd. v. Prudential Lines, Inc.*, 730 F.2d 159, 164 (4th Cir. 1984) (finding that "any passing distance under two miles is close quarters in a fog").

The district court sought to distinguish these cases: “[T]hese cases describe ships on the high seas where it is reasonable to expect vessels to remain further away from each other . . . but the West Hinder TSS is a different story.” *Otal*, 2006 U.S. Dist. LEXIS 5293 at *32. The West Hinder TSS is “heavily trafficked and despite the late hour there were quite a few other vessels in the area. It would be naive to assume that a vessel was obligated to maneuver when it was ten or more minutes away from collision, because to avoid one collision could serve only to put it on a collision course with another.” *Id.* at 32-33 (footnote omitted).

We reject this reasoning. Most important, it contains a faulty premise; it was not the case that if the Clary turned ten minutes before the collision such “could serve only to put it on a collision course” with another vessel. To the contrary, the record discloses a number of alternative routes—encompassed by starboard turns of various degrees and reduction of speed—none of which would have entailed colliding with another vessel. Moreover, in focusing on the term “close-quarters,” the district court failed to interpret correctly COLREG 19(d). COLREG 19(d) functions to prevent collisions by urging action at an early stage, requiring vessels to “take avoiding action *in ample time*” whenever a “*risk of collision*” exists or a “close-quarters situation *is developing*” (emphases added). In this case, the risk of collision arose when the Kariba steadied on its westward course after rounding the Fairy South Buoy. At this point—approximately ten minutes before the Kariba decided to make its fateful turn—the Clary had a COLREG 19(d) duty to take avoiding action.

The avoiding action under COLREG 19(d) could have taken either one of two basic forms. First, the Clary could have slowed. Second, the Clary could have made a starboard turn astern the Kariba and the Tricolor. The Clary argues it made its starboard turn at the earliest

possible moment because it was limited by its desire to make a “dramatic” 50 or 55 degree turn so that its change of course would register on other vessels’ radar. At the same time, asserts the Clary, the COLREGS prohibited it from crossing outside the bounds of the TSS. The point at which it actually turned, the Clary notes, was the earliest point at which it could make a “dramatic” turn while staying within the bounds of the TSS.

This argument is unpersuasive. Certainly, the avowed custom of making a “dramatic” 50 or 55 degree turn is wise. But nothing in the COLREGS mandates a turn of this magnitude; the COLREGS only mandate avoidance. Thus it makes no sense for a vessel to try to reach the magical 55 degree angle, all while increasing the risk of collision ahead. Further, the COLREGS do not prohibit turns that lead a vessel to cross out of a TSS. According to COLREG 10, vessels must “so far as practicable keep clear of a traffic separation line or separation zone.” 33 U.S.C. foll. § 1602 R. 10(b)(ii). “[N]ormally,” a vessel should “join or leave a traffic lane at the termination of the lane” 10(b)(iii). The conspicuous qualifying language—“normally,” “so far as practicable”—demonstrates the relative flexibility of COLREG 10. COLREG 10 even includes guidance for those obliged to cross out of a TSS; those who “do so shall cross on a heading as nearly as practicable at right angles to the general direction of traffic flow.” 10(c). *See also* Marsden 6-272 (opining that vessels must balance the risk of staying within the TSS against the risk of crossing out of it). In other words, the text of COLREG 10 specifically anticipates that vessels sometimes must cross out of the TSS. It is clear from the record the Clary faced no particular risks in crossing out of the TSS; while there was traffic in the TSS, no vessels were proceeding on the North-South branch near the Clary. Meanwhile, the Clary encountered

great risk in continuing on its collision course with the Kariba—a risk that contributed to the collision in this case.

We hold, therefore, that the Clary violated COLREG 19(d) in failing to take avoiding action promptly. As soon as the Kariba steadied on its collision course with the Clary, the Clary could have reduced its speed or made a starboard turn astern the Kariba and the Tricolor. In making this starboard turn, the Clary could have chosen to make a shallow turn of perhaps 10 or 15 degrees and stayed within the bounds of the TSS. Alternatively, the Clary could have executed a 50 or 55 degree starboard turn that would have led it to cross out of the bounds of the TSS. In failing to take either type of avoiding action, the Clary, as a matter of law, violated COLREG 19(d).

c. Unexplained Alterations of Ships' Records

Appellants the Kariba and cargo owners note the Clary's logbooks had been altered. The district court gave no legal effect to this fact: "It is true that the Clary . . . was at best sloppy and at worst dishonest in its on-board log-keeping, but none of these violations appear causative of the collision." *In re Otal Investments, Ltd.*, 2006 U.S. Dist. LEXIS 5293 at *29. Although the alteration of the logbook obviously did not "cause" the collision, the fact of the alteration has relevance to the ultimate allocation of liability for damages.

Our admiralty jurisprudence is especially sensitive to the unexplained alteration of logbooks. Where a logbook is altered, we "cannot avoid the conclusion that it had been dressed up to excuse the ship's faults." *Warner Barnes & Co. v. Kokosai Kisen Kabushiki Kaisha*, 102 F.2d 450, 453 (2d Cir. 1939) (Learned Hand, J.). Such alterations should give rise to a presumption the logbook contained entries adverse to the vessel's contentions at trial. The

inference “goes much further than merely to discredit the document itself; it is positive evidence upon the very issue” of liability. *Id.* “When a party is once found to be fabricating, or suppressing, documents, the natural, indeed the inevitable, conclusion is that he has something to conceal, and is conscious of guilt.” *Id.* We join the Fifth Circuit: “The unexplained alteration of a ship’s record of maneuvers not only casts suspicion on the whole case of the vessel, but creates a strong presumption that the erased matter was adverse to her contention” *Tokio Marine & Fire Ins. Co. v. Flora MV*, 235 F.3d 963, 971 (5th Cir. 2001) (citations and internal quotations omitted); *see also Hal Antillen N.V. v. Mount Ymitos MS*, 147 F.3d 447, 452 (5th Cir. 1998); *The Silver Palm*, 94 F.2d 754, 762 (9th Cir. 1937); *The Etruria*, 147 F. 216 (2d Cir. 1906); *Andros Shipping Co. v. Panama Canal Co.*, 184 F. Supp. 246, 259 (D.C.Z. 1960); Craig Allen at 32; Healy & Sweeney 56. Much of the case law concerning unexplained alteration of logbooks emphasizes the distinct force of the attendant adverse presumption. The presumption is a strong one because it serves not only to engender truth in evidence, but also to deter vessels from engaging in an act of obfuscation that threatens the disposition of interests of vessel and cargo owners and impedes civil and criminal investigations into the cause of the collision. *See, e.g.*, 46 U.S.C. § 6101 (requiring the reporting of marine casualties within United States jurisdiction); 46 U.S.C. § 6304 (granting the Coast Guard the power to subpoena vessels’ logbooks); *United States v. Kostakis*, 364 F.3d 45 (2d Cir. 2004) (reviewing the guilty plea and sentence of a merchant mariner prosecuted under 18 U.S.C. § 1001 for using a falsified ship’s record within the jurisdiction of the United States Coast Guard). This presumption is a rule of evidence; as an evidentiary rule of the forum, it applies in this case.

Here, Tonic erased his chart after passing through the area of the collision. At trial, Tonic admitted that “someone” had altered his logbook pages so as to reflect that there were three men on deck at the time of the collision—Tonic, an Able Bodied Seaman at the wheel, and a lookout—when in fact, Tonic had been alone on the bridge at the relevant times. In addition, Tonic’s logbook reflected that conditions were clear, when conditions in fact had been—at least for part of his shift—foggy.

Tonic’s admissions sharply diminish, if not eliminate, the relevance of the presumption normally arising from the alteration of a logbook. The presumption is especially useful in cases where the facts that should have been entered are not known, or at least are in dispute. *See, e.g., Tokio Marine & Fire Ins. Co. v. M/V Flora*, 1999 U.S. Dist. LEXIS 267, *30-31 (E.D. La. Jan. 11, 1999); *General Trading Co. v. S.S. Hellenic Carrier*, 1982 U.S. Dist. LEXIS 9462, *19 (S.D.N.Y. April 14, 1982). Here, however, those facts are known, indeed, admitted by the Clary’s officer. Thus, as to these facts, which were deemed adverse to the Clary by the district court, the presumption would add nothing. In some cases an issue might arise as to whether the fact of an alteration gives rise to a presumption that facts, other than those concealed by the alteration, are adverse to the party responsible for the alteration, but none of the parties adverse to the Clary has made such a claim in this case. Thus, although the fact of alteration may have a bearing on the ultimate issue of allocation of liability for damages, the presumption that the logbook contains facts adverse to the vessel responsible for the alteration need not be assessed.⁶

d. Conclusion

⁶ The Kariba’s owner contends that falsification is “positive evidence, not just a presumption, that *the matter falsified* would weigh heavily against the vessel doing the falsifying.” Br. for Otal Investments Ltd. at 40 (emphasis added).

The district court correctly determined the Clary violated COLREG 5 on proper lookout. The district court erred in its interpretation and application of COLREG 19(d) on avoiding action; as a matter of law, the Clary violated COLREG 19(d). The Clary's alteration of its logbook will have some bearing on the ultimate issue of allocating liability for damages and the district court must take it under consideration.

C. Causation

There remains the question whether these violations of COLREGS caused the collision. Put another way, we still must determine whether the violations of the COLREGS constitute causative fault. We review findings of causation for clear error. *Ching Sheng Fishery Co. v. United States*, 124 F.3d 152, 157 (2d Cir. 1997). Yet, a district court's understanding of the standard of causation is a question of law, reviewed de novo. *Id.* at 158. In its decision, the district did not articulate a standard of causation. Though we do not quarrel with the district court's reticence in this regard, we do infer from the district court's reasoning that it applied an incorrect legal standard of causation. To the extent the district court's unspoken conception of the standard might have been correct, we deem its findings on causation to have been clearly erroneous. Typically, in a case exhibiting such an error, we would remand for further fact finding. We believe, however, that this case presents a record sufficiently well-developed, and circumstances so paradigmatic, as to allow us to render conclusions concerning causation as a matter of law. We do so, after framing the proper standard of causation.

1. The Proper Standard of Causation

The standard of causation under COLREGS and the Collision Convention mirrors the standard of causation under American maritime tort law. *Marsden 503*; *see, e.g., Tokio Marine*,

235 F.3d at 966. To show causation, a plaintiff must demonstrate the defendant's act was a factual or but-for cause of a harm and the defendant's act proximately caused the harm. *See Zuchowicz v. United States*, 140 F.3d 381, 388 (2d Cir. 1998) (Calabresi, J.) (thoughtfully discussing the general requirements of causation in the context of Connecticut law); Draft Restatement (Third) of Torts § 26 (2002).

An action is a factual cause of harm when the harm would not have occurred absent that action. Draft Restatement (Third) of Torts § 26. Put more concretely, a navigational error is a factual cause of a collision when “the collision would not have suffered the damage . . . but for the defendant's” error. Marsden 503. Factual cause may inhere even when the actions of a third party or another force intervene. *Zuchowicz*, 140 F.3d at 390-91.

The inquiry into proximate cause is less straightforward. In general, proximate cause limits liability to those “harms whose risks made the actor's conduct tortious.” Draft Restatement (Third) of Torts § 29. Beyond this, “[t]he requirements of proximity are many and varied, and are not simply linked to questions of closeness in time and space.” *Zuchowicz*, 140 F.3d at 389 n.8. We find one principle particularly pertinent to this case. “When an actor's tortious conduct is a factual cause of harm that is among the harms whose risks made the actor's conduct tortious, the actor is subject to liability for the harm even if an unforeseeable⁷ intervening act, including [a] . . . nonculpable human act, is also a factual cause of the harm.” Draft Restatement (Third) of Torts § 33(a). An actor will not be liable, however, for a “superceding” act—that is, an act that is “‘extraordinary,’ . . . defined as neither normal nor reasonably foreseeable.” *Exxon Co. v. Sofec, Inc.*, 54 F.3d 570, 574 (9th Cir. 1995) (quotation

⁷ Or, a fortiori, foreseeable.

marks omitted); *aff'd Exxon Co. v. Sofec, Inc.*, 517 U.S. 830 (1996). In applying a principle such as this, courts necessarily exercise “common sense and reasonable judgment.” *Blaine Richards & Co. v. Marine Indemnity Ins. Company of America*, 635 F.2d 1051, 1055 (2d Cir. 1980) (discussing the somewhat more restricted doctrine of causation applicable to maritime insurance cases).

The district court did not articulate a standard of causation. But in summing its causation analysis, the district court implied a relatively narrow framework: “There may have been other faults which led up to this single fault [of the Kariba’s abaft-the-beam turn], but none w[as] causative.” *Otal*, 2006 U.S. Dist. LEXIS 5293 at *23. This statement, coupled with the district court’s failure to articulate a causation standard, leads us to believe that it erred in conceiving the standard of causation.⁸ To the extent the district court conceived the correct standard, we hold that its findings are clearly erroneous. We principally track the doctrine of but-for and proximate causation as embodied by § 33(a) of the Draft Restatement and *Sofec*, 517 U.S. at 830, in analyzing the causative actions of the Kariba, the Tricolor and the Clary in turn.

2. The Causative Impact of the Kariba

The district court correctly found the Kariba to have caused the collision. If the Kariba had not made its abaft-the-beam turn, the collision with the Tricolor would not have occurred;

⁸ The district court’s approach to causation might be explained by presuming it had adopted the more attenuated standard of causation applicable in maritime insurance cases, where “the horrendous niceties of the doctrine of so-called ‘proximate cause’ . . . apply in a limited manner.” *Blaine Richards & Co.*, 635 F.2d at 1054. In those cases, our Circuit does apply “rather strictly the doctrine of *causa proxima non remota spectatur* (‘the immediate not the remote cause is considered’)” reminiscent of the district court’s above-quoted statement. *Id.*

the vessels would have continued on roughly parallel westward courses. Therefore, the Kariba's turn was a factual cause of the collision.

As noted above, the district court correctly determined this abaft-the-beam turn constituted a violation of the COLREGS. This abrupt abaft-the-beam turn caused a risk that the Kariba might collide with other vessels in close proximity—the same risk of harm as makes abaft-the-beam turns illegal under the COLREGS. No “extraordinary” action occurred thereafter. Thus the district court was correct to consider the Tricolor's violation a cause of the collision.

3. The Causative Impact of the Tricolor

As for the Tricolor, the district court erred in failing to find its violations to have caused the collision. If the Tricolor had not chosen to overtake in an unsafe place and in an unsafe manner, the collision would not have occurred; the Kariba would have passed across the Tricolor's bow. The Tricolor's decision to overtake and the manner of overtaking was thus a factual cause of the collision.

As noted above, the Tricolor violated the COLREGS in choosing to overtake the Kariba at an unsafe place and time and in an unsafe manner. This choice to overtake created a risk that other vessels, particularly the Kariba, would have less space, and less time, to avoid navigational exigency leading to a collision—the very same risk as makes inopportune overtaking a violation of the COLREGS. The Kariba and the Clary themselves might have increased the risk of collision to which the Tricolor contributed, but these actions were not “extraordinary.” Rather, these actions or similar actions intended to avoid a collision were foreseeable under the circumstances, and thus did not supercede the Tricolor's causative impulse. Commonsense and

reasonable judgment dictate the Tricolor was both a factual and proximate cause of the collision. We thus hold, as a matter of law, the Tricolor's overtaking was a cause of the collision.

It is possible the Tricolor also caused the collision through its violation of the COLREG on safe speed. Here, however, a distinction must be made. True, the Tricolor's violation of the COLREG on safe speed was a but-for cause of the collision; if the Tricolor had been travelling slower, the Kariba would have turned safely in front of its bow. But under the familiar *Berry v. Sugar Notch Borough*, 191 Pa. 345 (1899), line of cases, we nevertheless cannot consider the factor of the Tricolor's speed, when taken in isolation, to have "caused" the collision. As we have consistently reaffirmed, under *Berry v. Sugarnotch Borough*, "the issue . . . is whether, even after the event, we can say that the risk of such an accident was increased by the defendant's behavior." *Moore v. PaineWebber, Inc.*, 189 F.3d 165, 176 (2d Cir. 1999) (Calabresi, J., concurring.); *Zuchowicz*, 140 F.3d at 389. In this case, the Tricolor's unsafe speed, taken in isolation, is not the kind of transgression that leads a vessel to find itself in close proximity to another, abruptly turning vessel. In this sense, the Tricolor's unsafe speed alone did not stand as a cause of the collision.

Yet, the *Berry v. Sugarnotch* line of cases notwithstanding, the Tricolor's unsafe speed still might have been a cause of the collision. This question hinges entirely on whether the Tricolor, had it not been proceeding at an unsafe speed, would have been able to stop soon enough to avert or mitigate the harm of the collision. In other words, the question hinges not on the factor of the Tricolor's speed in isolation, but whether that speed reflected an inability to stop, or slow, in time to avoid the Kariba's abrupt abaft-the-beam turn. As the record does not reveal the answer to this question, we must remand for further findings.

4. The Causative Impact of the Clary

The district court also erred in failing to find the Clary caused the collision. If the Clary had not understaffed its bridge and failed promptly to take avoiding action, the collision would not have occurred. That is, the Clary would not have persisted in its collision course, and the Kariba would not have found the need to make its fateful turn. The Clary was thus a factual cause of the collision. As noted above, the Clary violated the COLREGS in failing to keep a proper lookout. In failing to keep a proper lookout, the Clary created a risk it could not swiftly and adequately compensate for a navigational exigency and avoid a collision—the same risk of harm as makes failure to keep a proper lookout a violation of the COLREGS. The Clary also violated the COLREGS in failing promptly to take avoiding action. In delaying its avoiding action, the Clary constrained the space and time in which the Kariba and the Tricolor could maneuver, thus creating a risk of collision—the same risk of harm as makes failure to take prompt avoiding action a violation of the COLREGS. The Kariba and the Tricolor themselves might have increased the risk of collision to which the Clary only contributed, but their actions were not so extraordinary as to supercede the Clary’s causative impact. Commonsense and reasonable judgment dictate the Clary was both a factual and proximate cause of the collision. We thus hold, as a matter of law, the Clary’s violations were a cause of the collision.

5. Conclusion

The district court correctly held the Kariba’s violations of the COLREGS to have been a cause of the collision. The district court erred, however, in determining the Tricolor’s and the Clary’s violations of the COLREGS did not cause the collision. In reversing, we conclude all three vessels committed violations of the COLREGS that caused the collision. It is unclear

whether the Tricolor's unsafe speed was a cause of the collision; to the extent the answer to that question requires further findings, the district court must make those findings as part of its inquiries into allocation of liability for damages, an issue to which we now turn.

D. Allocation of Liability for Damages

Since we have ruled that all three vessels were at fault and that, at least to some extent, their respective fault caused the collision, the issue remains for the district court on remand to allocate liability for damages among the three vessels. In *United States v. Reliable Transfer Co.*, 421 U.S. 397 (1975), the Supreme Court replaced the admiralty rule of equally divided damages with a rule that “when two or more parties have contributed by their fault to cause property damage in a maritime collision or stranding, liability for such damage is to be allocated among the parties proportionately to the comparative degree of their fault,” unless such measurement is not possible. *Id.* at 411. The phrase “degree of their fault” created an ambiguity as to whether the Court meant the comparative degree of their culpability or blameworthiness, *i.e.*, how extensively each ship departed from a proper standard of care, or the comparative causative effect of each ship's conduct, *i.e.*, the extent to which each ship's culpable conduct contributed to causing the collision. American courts have understood *Reliable Transfer* to mean liability “according to relative culpability of the parties' actions rather than their respective degrees of physical causation.” *Afran Transport Co. v. S/T Maria Venizelos*, 450 F. Supp. 621, 636 (E.D. Pa. 1978); *see Maritime & Mercantile International L.L.C. v. United States*, 2007 U.S. Dist. LEXIS 19792, *66 (S.D.N.Y. February 28, 2007); *In re Seiriki Kisen Kaisha*, 629 F. Supp. at 1381 n.3 (collecting cases).

However, as Judge Sand pointed out in *Seiriki Kisen Kaisha*, Article 4 of the 1910 Collision Convention, which allocates liability “in proportion to the degree of the faults respectively committed,” has been understood by the courts of Great Britain to assess comparative fault on the basis of both relative culpability and relative causative effect of each party’s acts.” *Id.* at 1381 (citing cases). Courts in France, Germany, and Italy have done the same. *See* Healy & Sweeney at 311. We agree with Judge Sand’s two-component analysis in *Seiriki Kisen Kaisha*, followed by Judge Baer in the pending appeal, *Otal*, 2006 U.S. Dist. LEXIS 5293 at *20-21, and interpret the Convention, which applies in the pending case, to require consideration of both culpability and causative effect.

Thus, on remand the district court will have to consider the relative culpability of each vessel and the relative extent to which the culpability of each caused the collision. In making the culpability comparison, the district court should include in its consideration of the fault of the Clary the fact that its logbook was altered. We hasten to add, however, that allocation of liability for damages, requiring consideration of matters not readily amenable to precise analysis, does not oblige an admiralty judge to do more than provide ultimate percentages of allocation, accompanied only by sufficient explanation to provide a reviewing court with some general understanding of the basis for the decision. *See, e.g., Seiriki Kisen Kaisha*, 629 F. Supp. at 1382 (allocating responsibility on a 60%-40% basis).

E. The Limitation of Liability

Under the Limitation of Liability Act, a vessel owner may seek to limit its liability by filing a complaint in district court. *See* 46 U.S.C. App. § 183, revised at 46 U.S.C. § 30505, et seq. and Fed. R. Civ. P. Supplemental Admiralty Rule F. The *Kariba* asked the district court to

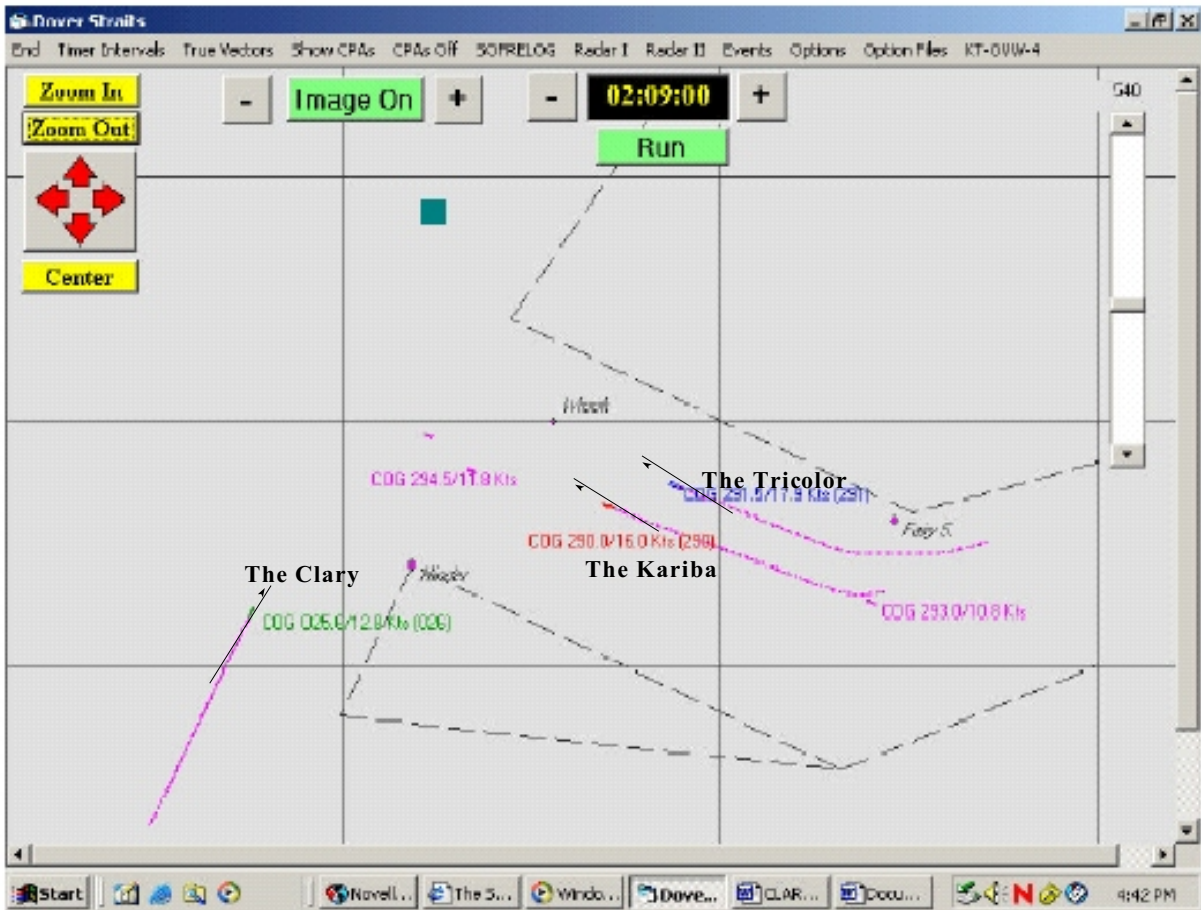
extend an order limiting liability to all parties to this case, enjoining further litigation both inside, and outside, the United States. Although it entered an order limiting liability, it did so only with respect to litigation “in the United States.” *In re: Otal Investments, Ltd.*, No. 03-4304 at *4 (S.D.N.Y. Feb. 16, 2006). The Kariba contends this was error. We disagree. *See In re Complaint of Bowoon Sangsa Co.*, 720 F.2d 595, 599 (9th Cir. 1983) (“[T]he decree in a limitation proceeding is given merely a domestic and not an international recognition.”) (quoting Gilmore & Black, *The Law of Admiralty* 944 (2d ed. 1975)); *Petition of Bloomfield S.S. Co.*, 422 F.2d 728, 736 (2d Cir. 1970).

III. Conclusion

The district court did not err in declining to apply the rule in *The Pennsylvania*. The Kariba, the Tricolor and the Clary all committed violations of the COLREGS. Moreover, each vessel committed at least one violation that constituted a cause of the collision. The district court did not err in declining to extend its limitation of liability order to parties outside the United States.

REVERSED and REMANDED.

Appendix



This diagram, taken from appellee the Clary's brief and intended only as a guide to aid the reader's visualization of the events surrounding the collision, illustrates the positions of the three vessels at approximately 2:09 on December 4, 2002. The dashed lines represent the bounds of the Traffic Separation Scheme. The arrows represent the vessels and their directions.

JON O. NEWMAN, *Circuit Judge*, with whom Judges Hall and Irizarry join, concurring:

I fully concur in Judge Hall’s comprehensive opinion, and write these additional words to urge the development of some form of sea traffic control system for crowded sea lanes to lessen the risk of a ship collision of the sort illustrated by this appeal. A sea traffic control system need not be as elaborate as modern air traffic control systems, but the lack of even a rudimentary nautical counterpart to the systems that monitor and control crowded air spaces cries out for a remedy. Such a system seems especially needed for sea lanes like the English Channel or at least for narrow portions of it like the Dover Straits, where many ships frequently travel in crossing patterns.¹

The undisputed evidence in this case shows that several ships were sailing through the Hinder 1 buoy intersection in the English Channel at the same time on a foggy night in 2002. The Kariba and the Tricolor were heading from east to west, and the Clary was heading from south to north. The speed and course of the Clary and the Kariba were such that, in the absence of some adjustments by either vessel, they would collide. Ultimately, as detailed in Judge Hall’s opinion, the Kariba, trying to avoid being struck by the Clary, turned to starboard and collided with the Tricolor, which was overtaking the Kariba.

Judge Hall fully discusses the legal issues concerning the liability of each ship. My additional concern is the lack of a system for effectively alerting ships in crowded waterways to appropriate steps to be taken to avoid impending perils of collision. If air traffic controllers can monitor airplanes in crowded air spaces and require them to adjust speed, course, or altitude to avoid a collision, surely some similar system for requiring adjustment of speed or course can be

¹As the District Court noted, “On a typical day there are 124 vessels crossing the traffic lane . . . and 131 vessels following the traffic lane.” *In re Otal Investments Ltd.*, 2006 U.S. Dist. LEXIS 5293, at *32 n.7 (S.D.N.Y. Jan. 6, 2006).

implemented for crowded sea lanes like many of those in the English Channel.

The evidence discloses that some technology was in use on the night of the collision in this case, but it clearly was not sufficient. The Tricolor and the Kariba, but not the Clary, used an Automatic Radar Plotting Aid (“ARPA”), which shows the course and speed of nearby ships and calculates, for any two ships, their Closest Point of Approach (“CPA”). ARPA does not identify nearby ships by name or any other distinguishing characteristic that might facilitate communication. Clary’s even less effective radar system showed nearby ships, but displayed their course and speed and calculated a CPA only when a radar operator manually sought such data for a particular ship.

A shore-based radar facility at Dunkerque on the French coast, known by the name of its manufacturer, Solfrelog, S.A., tracked the three vessels, but the Solfrelog station provided no communication to the ships it was tracking, communication that might have instructed on steps to avoid impending perils, or at least of the fact that such perils exist. From data stored in the Solfrelog system, the District Court was supplied with a series of video images of the various positions of the three ships in the minutes prior to the collision. Even these images, available after the fact, are inexact, as the District Court noted, because of a time lag in reflecting speed and course changes. *See In re Otal Investments Ltd*, No. 03-4034, 2006 U.S. Dist. LEXIS 5293, at *7-*8 (Jan. 6, 2006). And the images are recorded at intervals, rather than continuously.

A significant deficiency in collision avoidance, as of the date of the collision in this case, was the ineffectiveness of communications capability among nearby ships. The VHF radios on board the ships were customarily not used because they did not enable direct communication with only one vessel, the ship sending a message could not be certain whether nearby ships were receiving the message, and, if the signal was received by nearby ships, they could not determine from which ship

it came.² It is not clear whether these deficiencies are remedied even by the radiotelephone bridge-to-bridge requirements applicable to certain classes of vessels on navigable waters of the United States. *See* 33 U.S.C. §§ 1201-1208 (2000).

Since 2002, some improvements have been made. A notable development has been the introduction of automatic identification systems (“AIS”) permitting identification of vessels by name and other information, now required for some vessels on navigable waters of the United States, *see* 46 U.S.C. § 70114 (Supp. II 2002); 33 C.F.R. § 164.46 (2003), especially when used in connection with the orbiting satellites of the Global Positioning System (“GPS”). *See*

²Captain Torbog, the expert for the Tricolor, when asked at trial whether Second Officer Tonic on the Clary could have called Captain Kamola on the Kariba and alerted the Kariba to the Clary’s planned turn, answered:

I don’t know if Kamola and Tonic would have understood each other on the VHF, would have been able to make a complete call without knowing who the other guy was or where he was. There were five vessels in that traffic lane that the Kariba was in, and this is why the British Government, the Chamber of Shipping and all the governments in that area of the world do not want people talking on VHF’s because you get one ship talking to the wrong ship and then everybody gets, somebody gets messed up.

Tr. 857.

Captain Torborg amplified his views in a report as follows:

The U.S. Radio Telephone Act requires radio contact between vessels approaching one another when they are within 50 miles of the United States. Europeans discourage the use of VHF for collision avoidance, and expect vessels to follow the COLREGS without attempting to communicate with vessels whose watch officer may not be completely fluent in the English language. It is in their training to limit all VHF radio communications. The United Kingdom Maritime and Coast Guard Agency has issued notices requesting the limitation of VHF use and a similar admonition is published in the Bridge Procedures Guide published by the International Chamber of Shipping.

Ex. 364, at 20.

<http://www.navcen.uscg.gov/enav/ais/default.htm> (last visited June 27, 2007) (AIS);

<http://www8.garmin.com/aboutGPS/> (last visited June 27, 2007) (GPS).

Internationally, Chapter V of the International Convention for the Safety of Life at Sea (“SOLAS”) has been amended to begin requiring AIS on large cargo vessels and all passenger ships. See http://www.imo.org/Conventions/contents.asp?topic_id=257&doc_id=647 (last visited June 27, 2007).

To improve after-the-fact understanding of what happened in the minutes prior to a collision, the International Maritime Organization, the United Nations sponsored agency concerned with shipping safety, has issued regulations requiring Voyage Data Recorders, but these are currently implemented only for passenger vessels. *See* <http://www.blankrome.com/index.cfm?contentID=37&itemID=1270> (last visited June 27, 2007).

It would seem imperative for maritime nations and vessel owners to cooperate in establishing some system to monitor ships in crowded sea lanes, especially those with ship crossing patterns, and require maneuvers to avoid collisions. For the English Channel, for example, sea traffic control centers might be established at a few points along the English and French coasts, handing off control of ships to adjacent stations, just as air traffic controllers hand off airplanes to nearby air traffic control centers. Proper radar and communications equipment could be more extensively required (at least for ships of sufficient size to preclude rapid adjustments of course and speed), and non-complying ships could be denied access to crowded sea lanes. Perhaps the appropriate international bodies might take the lead in developing such a system.

The perils of the sea have been with us since Noah sailed his ark, and some will always remain, but in the 21st century, I think we can do better at reducing the risk of ship collisions.