IN THE UNITED STATES COURT OF APPEALS

FOR THE FIFTH CIRCUIT

No. 91-3178

C.J. LANGENFELDER & SON, Inc.,

Plaintiff-Appellant,

v.

DANA MARINE SERVICE, INC., in personam and the M/V VICTORIA, her engines, tackle, apparel, et cetera, in rem,

Defendants-Appellees.

Appeal from the United States District Court
for the Eastern District of Louisiana
(CA 89 4827 G)

(December 29, 1992)

Before KING, JOHNSON and DAVIS, Circuit Judges.

KING, Circuit Judge:[*]

This admiralty case concerns the ill-fated voyage of the GSOT-2000, a shallow inland barge that was towed 200 nautical miles out into the Gulf of Mexico, where it sustained extensive damages from strong winds and rough waves. Following a bench trial, the district court issued lengthy findings of fact and

---

[*]Local Rule 47.5 provides: "The publication of opinions that have no precedential value and merely decide particular cases on the basis of well-settled principles of law imposes needless expense on the public and burdens on the legal profession." Pursuant to that Rule, the court has determined that this opinion should not be published.

conclusions of law, entirely absolving the defendant towing company of liability. After a careful review of the record, we reverse and render judgment for the plaintiff barge owner.

I.

Because factual disputes comprise a large part of this appeal, we will recapitulate the significant testimony and evidence adduced at trial prior to summarizing the district court's findings and conclusions. In October 1987, Langenfelder & Son, Inc., a Baltimore-based company, was in need of barges for its East Coast shell-fishing operations. Jim Matters, who was in charge of purchasing equipment for Langenfelder, was unable to locate any suitable barges on the East Coast. Matters thus traveled to Forked Island Shipyard in Louisiana, where he discover two thirty-year old barges that suited the company's needs, the GSOT-3001 and the GSOT-2000. Both were shallow inland, as opposed to seagoing, barges.[2] The GSOT-3001 measured ten-and-a-half feet deep and the GSOT-2000 measured twelve feet deep. According to Matters, he thoroughly inspected the barges before purchasing them. The GSOT-3001 was in remarkable condition for its age. The GSOT-2000 was in somewhat worse condition, although its prior employment as an oil-carrying

[2] It is undisputed that an inland and ocean-going barges are designed differently. As Dana's Vice-President Dreijer conceded at trial, inland barges are "not built to sustain heavy weather and the seas in the Gulf of Mexico." See also Aiple Towing Co. v. M/V Lynne E. Quinne, 534 F. Supp. 409, 410 (E.D. La. 1982); Globe & Rutgers Fire Insurance Co. v. Steamship Hallo, 1928 A.M.C. 1887, 1888-89 (S.D.N.Y. 1928).

vessel had inhibited aging and rusting inside the barge. Matters testified that he discovered "a tear or a corrosion spot" approximately two feet long in the GSOT-2000's knuckle near the front of the No. 1 starboard tank. He also observed a small split in a stern tank. The sides of the GSOT-2000 were slightly dented but otherwise in good condition. The remainder of the hull and the barge's frames also appeared to be in good condition. The deck seemed "brand new." Matters testimony about the condition of GSOT-2000 at the time of purchase was uncontroverted.

Matters purchased the GSOT-3001 for $55,000 and the GSOT-2000 for $22,000 and arranged to transport both barges to Saucer Marine Service, Inc., in New Orleans, for dry-docking and repairs. Matters again thoroughly inspected the GSOT-2000 while it was dry-docked, confirming his prior conclusion that the barge was in need of certain repairs but was, when viewed as a whole, in good condition. At Saucer, Matters arranged for an audiogauge survey[3] of the GSOT-2000 in order to determine whether it had suffered excessive wasting at any points on the hull. Testimony of several witnesses indicated that the original thickness of the hull was 3/8" or .375 inches. Matters testified, and the audiogauge report confirms, the vast majority of thin spots were found at the bow and at the bilge knuckles on the sides of the

[3] An audiogauge survey is an ultrasonic examination of the thickness of a vessel's hull.

barge.[4] Saucer installed 5/16" steel double-plating at the bilge knuckles all along both the port and starboard of the barge, added numerous new .25" double-plates to the thin portions of the bow, welded all fractures in the hull, repaired deck holes, sandblasted and repainted the entire hull, and secured all manhole and Butterworth hatch covers. After performing over $40,000 in repairs, Saucer thereafter certified that the GSOT-2000 was seaworthy.

Douglas Halsey, an expert who testified on behalf of the defendant towing company, Dana Marine Service, Inc., was a former Coast Guard inspector. Halsey never physically inspected the GSOT-2000 and opined exclusively on the basis of selected photographs of the barge, Saucer's repair invoices, and the Coast Guard's file on the GSOT-2000. He agreed that the hull underneath the No. 2 port and starboard tanks -- where the bulk of the GSOT-2000's damage was inflicted -- were not wasted below .281" at the time of purchase. Halsey expressed the view, however, that Saucer's double-plating of portions of the hull and the bilge knuckles did not add any hull strength because the plates were probably attached with temporary "fillet" welds rather than permanent "plug" welds. Halsey did not in fact know what kind of welds were used, but speculated based on the lack of

[4] One of Dana's experts testified that Coast Guard regulations require that a seagoing barge's hull should not be wasted more than twenty-five percent of the original thickness, which in the case of the GSOT-2000 required the hull be more than .281 inches thick. The audiogauge report showed that 33 of the 135 spots tested revealed wasting in excess of 25 percent of the hull's original thickness.

an itemized charge for plug welds in Saucer's repair invoice. One of Langenfelder's experts, Archie Randall, an experienced marine surveyor, testified that the double-plating did add strength to the hull.

Following Saucer's repairs, Matters entered into an oral contract with Erik Dreijer, Vice President of Dana Marine, for towage of both barges to Maryland. Dreijer admitted that Matters had informed him that the two vessels were inland, rather than seagoing, barges. Because the inland barges would be venturing out to sea during their voyages to Maryland, Langenfelder was required by law to secure temporary certificates of inspection from the Coast Guard. Matters oversaw the Coast Guard's inspection of the GSOT-3001, but, because he had business in other states, left it to Saucer's manager, Carol Ragas, to ensure that the Coast Guard inspected and certified the GSOT-2000. Ragas testified that the Coast Guard representative made two trips to Saucer to inspect the GSOT-2000, first to look at the barge while it was being repaired in drydock, and later for a final inspection after the barge was again afloat. Ragas testified that he did not remember showing a Coast Guard inspector the repair invoice; however, in his experience, Ragas testified, Coast Guard inspectors normally were not interested in repair invoices for purposes of certification. However, Ragas testified that the Coast Guard inspector was apprised of all repairs because he was present as the repairs were being conducted.

The Coast Guard inspector concluded that the GSOT-2000 was seaworthy for its intended voyage and that it "in all respects [conformed] with applicable vessel inspection laws and regulations." Identical temporary certificates of inspection, permitting a "change of employment" for the GSOT-2000 and GSOT-3001, were thus issued. Under the section headed "Route Permitted and Conditions of Operation" was specified:

> VESSEL IS PERMITTED TO MAKE A ONE WAY COASTWISE VOYAGE FROM NEW ORLEANS, LOUISIANA TO BALTIMORE, MARYLAND IN FAIR WEATHER ONLY, WITHOUT PASSENGERS OR CARGO. ALL OPENINGS TO THE HULL SHALL BE CLOSED AND SECURELY FASTENED.

Dana's expert, Halsey, discounted the significance of the GSOT-2000's certificate of inspection. Based solely on the absence of copies of the repair invoice and audiogauge report from the Coast Guard's inspection file, Halsey inferred that the representative who inspected the GSOT-2000 at Saucer did not see either document before issuing the inspection certificate. Such information was essential to an adequate certification, Halsey claimed. Contradicting Ragas' testimony, Halsey testified that Coast Guard policy requires inspectors to examine and then attach copies of all repair invoices and the results of an audiogauge survey to an inspection report.

Following certification of the two barges by the Coast Guard, Dana Marine first towed the GSOT-3001 to Virginia in late October and early November of 1987. The two-week trip was made without incident. The tug's captain followed a course that generally stayed near the coastline and ducked into ports on

numerous occasions whenever waves heights were considered excessive.[5] Matters stated that, although he did not explicitly demand that Dana Marine follow a similar route in towing the GSOT-2000, he was under the impression from his discussions with Dreijer that Dana Marine would tow the GSOT-2000 along the coast and duck into port whenever the waves became rough. Matters expected the GSOT-2000's exposure to the open Gulf to be extremely limited.

It is undisputed that Dana Marine did not inform the tug captain assigned to tow the GSOT-2000, Richard Burroughs, that the barge was an "inland" vessel or that the Coast Guard certificate specified a "coastwise" and "fair weather only" voyage. Nor did Burroughs inspect the certificate prior to embarking from Louisiana. Before departure, Burroughs simply gave the barge a cursory walk-around inspection, mainly to check to see that all hatches were battened down. He testified that he found the hatch covers seemed secure and that the barge appeared otherwise fit for towing. He stated that he could not tell whether it was an inland or seagoing barge based on his walk-around inspection. Dreijer, a tug captain since 1977 and vice president of Dana Marine since 1984, testified that an inland barge is easily distinguishable during a walk-around inspection

[5] The captain's log recorded that he repeatedly "waited on [the] weather" at ports along his route. Wave heights of four to seven feet, five to eight feet, and six to eight feet were considered to be too rough for towage of the GSOT-3001. As will be discussed in infra Part III, the district court erred by refusing to admit the captain's log of the GSOT-3001 into evidence.

by its lack of distinctive markings on the vessel's side. He also admitted that a captain preparing to tow a barge should examine its certificate of inspection.

Burroughs charted a course that would take the GSOT-2000 at least 200 nautical miles out into the Gulf. The tug captain testified that he specifically checked the National Weather Service's forecast for his intended route across the Gulf before he embarked. According to Burroughs, the reports that he listened to predicted winds of ten to fifteen knots and seas of three to four feet for the coming days. He embarked early on November 14th. After exiting at the Mississippi River-Gulf Outlet at approximately 7:30 p.m., Burroughs set a course directly across the Gulf for Key West, Florida.

According to Burrough's captain's log, early in the morning of November 15th, winds were fifteen to twenty knots. By 3:00 p.m. on the 15th, the wind was up to twenty-five knots and the wave heights reached eight to ten feet. The captain continued to head straight into the increasing winds and waves on a course that took him farther from the coast. By noon on November 16th, seas reached ten to twelve feet, but Burroughs continued to steer a course away from the shoreline. Conditions worsened throughout the 16th, with wave heights reaching fourteen feet as day turned into night. Burroughs testified that the heavy waves significantly slowed the tug's speed. On the night of November 16th, prior to retiring shortly before midnight, Burroughs

checked the GSOT-2000. The barge was riding well despite the rough wind and wave conditions.

John L. Gagnet, Jr., an expert in weather forecasting who had advised towing companies about weather and routes in the Gulf for over thirty years, testified about the National Weather Service's official forecasts which were broadcasted and available to persons navigating the Gulf. The official forecasts contradicted Burroughs' testimony about the weather conditions that were predicted.[6] Early in the morning of November 14th, shortly before the tug departed, official forecasts for the portion of the Gulf through which Burroughs traveled called for winds of ten to fifteen knots during the day, increasing to fifteen to twenty knots the night of the 14th, and increasing to twenty to twenty-five knots by early November 15th. Seas were predicted to be five feet or less through the night of November 14th, increasing to five to seven feet by the 15th. The extended outlook through November 16th predicted "strong . . . winds and rough seas." A revised forecast, issued on the afternoon of the 14th shortly before the tug entered the open Gulf, called for winds ten to twenty knots through that night, increasing to fifteen to twenty-five knots by the night of November 15th. Seas were predicted to reach nine feet by the night of the 15th, and ten feet by the early morning of the 16th. These forecasts for

[6] Burroughs was showed the official weather reports. On cross-examination by counsel for Langenfelder, Burroughs conceded that "without doubt these forecasts show higher winds and sea conditions than what you testified were the forecasts received on the day you left with the GSOT-2000."

November 15th and 16th also predicted "widely scattered showers," and "numerous" thunderstorms. The extended forecasts for late November 16th and 17th issued on November 15th continued to predict "strong . . . winds and rough seas" or "strong winds and high seas."

Gagnet testified that the National Weather service forecasts for wind and wave conditions closer to shore -- within a fifty nautical mile perimeter -- were less tempestuous than conditions 200 nautical miles out in the Gulf. Early on November 14th, the official forecast called for winds up to fifteen knots and seas between two and four feet. Extended wave forecasts within the fifty nautical mile perimeter indicated that seas could reach maximum heights of five to seven feet. Notably, these forecasts did not call for "strong winds and rough seas," but instead merely predicted "choppy" seas. Gagnet thus concluded that "[t]he coastal marine forecasts were generally . . . less[er] conditions," in particular, "less seas [were] forecast[ed]."

Gagnet also testified that somewhat unpredictable "rough conditions" are frequently experienced throughout in the Gulf in November, as storm fronts regularly pass through every three to five days. He also stated that thunderstorms could result in higher than predicted waves. Gagnet opined, "[i]n this particular case [in view of] the weather that was forecast[ed] and was available [to Captain Burroughs], . . . either the coastal or inland route should have been taken . . . because in

the event that any bad weather would have come up unexpectedly [he would have] had a port to go to."

On the morning of November 17th, Burroughs noticed that the GSOT-2000's starboard bow was awash and listing. He immediately altered course to Tampa. The captain testified at trial that he was apprised of the Coast Guard's temporary certificate of inspection for the first time in Tampa. Significantly, he stated that he "[i]nterpreted it to mean the barge was not seaworthy." He then testified that had he seen the certificate before leaving New Orleans, he would have taken a coastal route.

In Tampa, Dana Marine hired Charles Harden, a marine surveyor and consultant, to ascertain the extent of the damage, which proved to be significant. Matters also flew to Tampa to inspect the barge. Uncontroverted testimony at trial indicates that the principal damage was to the No. 2 tanks of the barge.[7] The hull plate underlying the No. 2 starboard tank was completely missing, and a good portion of the plate underlying the No. 2 port tank was missing. In addition, there was some structural damage -- twisting, bowing, and fracturing of the internal structure -- and small leaks and tears in the front portion of the barge. Notably, all of Saucer's double-plating remained fully intact.

There was testimony at trial regarding navigational standards of care relevant to Dana Marine's towage of the GSOT-

[7] The barge had nine tanks. The No. 1 tank was contiguous with the bow, and the No. 9 tank was contiguous with the stern.

2000. Langenfelder presented the testimony of Norman Antrainer, an experienced tug captain, as an expert on standards of prudent navigation. Antrainer echoed Dreijer's testimony regarding the difference in markings on oceangoing and inland barges. He also stated that once it is apparent that a barge is of an inland variety, a prudent captain should "check the Coast Guard papers to see if there [are] any special instructions as far as the barge's route that it is going to have to take." Antrainer testified that, had he been assigned to tow the GSOT-2000, given the available weather reports he would have hugged the coastline as much as possible and would have towed the GSOT-2000 into the open Gulf -- when a coastal route was not feasible -- only when weather conditions were calm. With an inland barge and a small tug, Antrainer opined, it is best to avoid storm systems and stay near the protected waters of a harbor. "A small tug like [the GSOT-2000] cannot outrun the weather" when it is out in the middle of the Gulf, he stated. Dana's Vice President Dreijer, himself a tug captain, disputed Antrainer's expert opinion by testifying that it was preferable to follow a route across the open Gulf. He claimed that a coastal route would take longer, thus increasing a tow's time of exposure to the regular November storm fronts passing through the Gulf.

Following the mishap, Langenfelder decided to engage in temporary repairs in Tampa so that the GSOT-2000 could continue on to Baltimore. Thereafter, the barge completed the voyage without incident. In Maryland, a marine service company made a

total of $124,144 worth of repairs, replacing the bottom of the No. 2 starboard and port tanks. Archie Jordan, an experienced marine surveyor, examined the GSOT-2000 in Baltimore over a period of two days. Jordan opined that "the hull had been subject to extreme stress" caused by pounding waves, which "was severe enough to cause stress failure [in] the bottom internal framing. . . . The welds failed, . . . thereby [causing] the bottom shell plates [of the No. 2 tanks to] be overstressed and fractured." Jordon further testified about the bowing and twisting of the frames of the barge, which was also result of the stress from the heavy waves. He referred to the GSOT-2000's injuries as a "textbook case of slamming damage."

II.

Invoking federal admiralty jurisdiction, Langenfelder instituted a negligence action against Dana Marine, and a bench trial was held. In issuing its lengthy Findings of Fact and Conclusions of Law, the district court agreed that Dana Marine

> violated its duty of reasonable care by the failure of Captain Burroughs to be apprised that the GSOT-2000 was an inland barge and that it had received a coastwise, fair weather only certificate of inspection. . . . Reasonable care required Dana Marine to insure that its Captain knew all information relevant to the safe and proper navigation of its tow.

However, the court held that Dana's breach of duty was not actionable negligence for a variety of reasons.

First, the district court held that "coastwise" and "fair weather," as used in the Coast Guard's certificate of inspection,

were vague terms which did not have the specific meanings that Langenfelder claimed. Therefore, the court did not consider Captain Burrough's ignorance of the certificate to be either negligence per se or even simple evidence of negligence. In the district court's view, "coastwise" could not reasonably be understood to refer to a route within twenty nautical miles of shore -- notwithstanding a Coast Guard regulation governing certificates of inspection whose definition of "coastwise" "includes all vessels normally navigating . . . the Gulf of Mexico 20 nautical miles or less offshore." Likewise, the court stated, "fair weather" was a vague term that had no precise definition in maritime law or custom. The district court thus afforded Captain Burroughs broad discretion to determine what qualified as "fair weather." The wind and wave conditions that existed 200 nautical miles out in the Gulf between November 15-17, 1987 -- which the National Weather Service described as "strong . . . winds and rough waves" -- could plausibly be considered "fair weather," the court held.

The court acknowledged Burroughs' testimony that he would have followed a course closer to shore had he seen the Coast Guard's certificate. However, this admission was considered insignificant for two reasons. First, "[p]laintiff failed to establish a duty that would have required Dana Marine to tow the GSOT-2000 on a different course had Captain Burroughs known of the tug's [inland] character and [`coastwise' and `fair weather'] certification." And, second, "plaintiff failed to establish

that Dana Marine would have been duty-bound to take a port of refuge" in the event of bad weather had the GSOT-2000 been towed along the coast. Therefore, the court concluded, because the weather conditions within the 50 nautical mile perimeter were "similar" to conditions 200 nautical miles out, the GSOT-2000 "would have suffered the same damages" had it been towed closer to the coast. The court did not credit the testimony of either Antrainer or Gagnet about the importance of staying near the shore in order to seek safe harbor in the event of heavy weather.

The district court further found that "the GSOT-2000 was not seaworthy for a voyage in the Gulf at this time of year." Significantly, the court stated that "[t]he evidence having failed to establish a contract or duty to move the barge along the coast, I must measure the barge's seaworthiness against a contemplated voyage that could justly be made directly across the Gulf." The court based its determination that the GSOT-2000 was unseaworthy on a finding that a significant portion of the barges's hull was wasted below .281" -- the minimum necessary hull thickness, according to Coast Guard regulations, for seagoing barges -- even after Saucer's repairs. The court found that, "[o]f the 33 places where the audiograph [sic] readings revealed greater than 25 percent thinning of the hull's original thickness, at least 17 were not double-plated." Because there were 135 spots originally tested, the court held that approximately one-eighth of the hull remained under .281". The court also accepted Halsey's testimony that the doubler plates on

the bow and knuckles failed to add any strength to the hull. Additionally, the court found that Langenfelder, not Dana Marine, was responsible for failing to adequately secure the Butterworth hatch which was blown open at sea, causing considerable flooding. The court held that this finding of unseaworthiness absolved Dana from any possible liability under the well-established principle of admiralty law that a tug is not liable for damage to an unseaworthy tow.[8]

The court did not feel constrained by the Coast Guard's certification as evidence that the GSOT-2000 was seaworthy for a coastwise, fair weather voyage, even assuming those terms meant what Langenfelder claimed. The court found that the Coast Guard inspection of the GSOT-2000 was inadequate, based on Halsey's speculation that the Coast Guard inspector did not have sufficient information on which to certify. Consequently, the court "g[a]ve little credit" to the certificate's implicit assertion that the GSOT-2000 was seaworthy for a coastwise, fair weather voyage.

Finally, although Dana Marine had not raised the issue, the court proceeded sua sponte to hold that Langenfelder had violated Coast Guard regulations. The court found that Langenfelder had failed, both while in New Orleans and Tampa, to comply with regulations that require a "survey" of a barge before major repairs. Based on these purported violations, the court invoked

[8] See, e.g., King Fisher Marine Serv., Inc. v. NP Sunbonnet, 724 F.2d 1181, 1184 (5th Cir. 1984).

"The Pennsylvania rule" of admiralty law,[9] and shifted the burden to Langenfelder to prove that its regulatory violations could not possibly have been a cause of the accident. The court found that Langenfelder had not met this burden. Consequently, the district court absolved Dana of all liability for the damages sustained by the GSOT-2000.[10]

III.

Because Langenfelder has asserted a tort claim of negligence, our analysis will be divided into a discussion of the four elements of such a claim: the existence of a duty, a breach thereof, proximate causation, and damages. See William Prosser, Handbook of the Law of Torts, § 30, at 143 (4th ed. 1971); Restatement (Second) of Torts, § 281 (1977). We reverse the judgment of the district court and hold that Langenfelder has established all four elements.

A. Breach of Duty

A tug is neither an insurer nor a bailee of its tow. Rather, a tug simply owes the tow's owner a duty to exercise the same degree of reasonable care and maritime skill "as prudent navigators employ for the performance of similar services." King Fisher Marine Serv., Inc. v. NP Sunbonnet, 724 F.2d 1181, 1184

---

[9] See The Pennsylvania, 86 U.S. (19 Wall.) 125 (1874).

[10] Although the district court totally absolved Dana of any liability, the court gratuitously made detailed findings about damages. These findings will be discussed in Part III.C., infra.

(5th Cir. 1984) (citing Steven v. The White City, 285 U.S. 195, 202 (1932)). The district court's findings regarding the breach of duty question pivoted around the court's determination that, although Captain Burrough's ignorance about the Coast Guard certificate breached Dana's duty of reasonable care, Dana may not be held accountable in view of the vagueness of the terms "coastwise" and "fair weather."

i) "Coastwise"

Citing express language contained in a definitional provision of the Code of Federal Regulations governing certificates of inspection, 45 C.F.R. § 90.10-ll, Langenfelder argues that the term "coastwise" means "20 nautical miles or less offshore." The court below rejected the argument that the term as used in the certificate, according to Coast Guard parlance, connoted such a mileage-restriction. Instead, the district court cited another, broader "customary" definition of "coastwise" as used in certain maritime statutes and regulations -- that is, "a voyage between a port in one State and a port in another State." See, e.g., 46 U.S.C. § 10501(a); 46 C.F.R. § 42.03-5(d). The district court then noted that "[i]t is against this background of customary, statutory and regulatory use of the term `coastwise' that I consider the Coast Guard regulations under which the GSOT-2000 received its inspection certificate." Because of the supposedly ambiguous nature of the term, the district court held that Dana Marine could not be held

accountable under the mileage-restrictive connotation. The court went so far to imply that holding Dana Marine accountable under such a vague term would constitute a due process violation under the void-for-vagueness doctrine. See Connally v. General Constr. Co., 269 U.S. 385 (1926).

The court below alternatively concluded that, even looking only at the term as used in the regulatory provision governing barge certificates, "coastwise" referred not to any mileage-restriction on the type of route taken but only to a classification of the type of vessel. The phraseology of that particular provision -- "[u]nder this designation [`coastwise'] shall be included all vessels normally navigating the waters of any ocean or the Gulf of Mexico 20 nautical miles or less offshore," 46 C.F.R. § 90.10-25 (emphasis added) -- was considered telling. The district judge compared this section with another mileage-restrictive definition in the Code of Federal Regulations in which "coastwise" referred to a "route" rather than a "vessel." See 46 C.F.R. § 90.05-7 ("Vessels inspected and certificated for ocean or unlimited coastwise routes shall be considered suitable for [inland] navigation . . . .").

We believe that the district court's interpretation of the regulatory term "coastwise" that appeared in the GSOT-2000's certificate of inspection is flawed in three ways. First, the mileage-restrictive connotation of "coastwise" is hardly cryptic. In addition to the provision in the Code of Federal Regulations

governing barge certificates of inspection, numerous other Coast Guard regulations in force at the time of the accident employed the term in referring to a twenty nautical mile perimeter. See, e.g., 46 C.F.R. §§ 70-10.13, 110.15-1(b)(2), 167-60.1(c). Nor is the mileage-restrictive connotation foreign to admiralty courts. See, e.g., Pacific Merchant Shipping Assoc. v. Aubry, 918 F.2d 1409, 1412 (9th Cir. 1990) (noting Coast Guard regulations define "coastwise vessels" as those "normally navigating the waters of any ocean or the Gulf of Mexico 20 nautical miles or less offshore").[11]

Second, 46 C.F.R. § 90.10-11 was the only regulatory provision using the term "coastwise" that was implicated by the Coast Guard's use of the term in the GSOT-2000's certificate; how other regulations and statutes define "coastwise" has no relevance to whether Dana may be charged with knowledge of § 90.10-11's explicit and narrow definition of the term. Under our system of law, all persons affected by regulations published in the Code of Federal Regulations are charged with legal notice of their provisions. Moody v. United States, 774 F.2d 150, 156 (6th Cir. 1985) (citation omitted), cert. denied, 479 U.S. 814 (1986). Further, Dana Marine's argument that "coastwise" in the GSOT-2000's certificate referred generally to "a voyage between two

[11] The dictionary definition of "coastwise" includes: "by or along the coast," "following along the coast," and "carried along the coast." 2 Oxford English Dictionary 557 (1st ed. 1971); Webster's Unabridged Third International Dictionary 433 (1976). The etymology of "coastwise" is also significant: the prefix "wise" means "in the position or direction of." Webster's New Collegiate Dictionary 1335 (1979).

ports in the same country" renders the term surplusage since obviously the barge was permitted to travel only from New Orleans to Baltimore.

Third, the district court's attempt to make apples and oranges out of the two adjective uses of "coastwise" in the various regulatory provisions referring to a twenty nautical mile perimeter is untenable. Whether "coastwise" modifies "vessel" or "route," the gist is the same: the vessel is not the type which follows a route that ventures beyond twenty nautical miles from the coast.[12] A "coastwise" vessel is one that normally is limited to taking "coastwise" routes. Moreover, the Coast Guard's particular use of the term in the GSOT-2000's certificate leaves no doubt that the term was intended primarily to limit the route rather describe the type of vessel. Under the heading, "ROUTE PERMITTED AND CONDITIONS OF OPERATION," the Coast Guard stated, "VESSEL IS PERMITTED TO MAKE ONE-WAY COASTWISE VOYAGE . . . IN FAIR WEATHER ONLY WITHOUT PASSENGERS OR CARGO." Accordingly, we find that, as a matter of law, the term

---

[12] Compare 46 C.F.R. § 167.60-1(c) ("When a nautical school ship . . . may be navigated . . . 20 nautical miles or less offshore, the route shall be designated on the certificate of inspection as 'Coastwise.'") with 46 C.F.R. § 90.10-11 ("Under this designation shall be included all vessels normally navigating the waters ... 20 nautical miles or less offshore."). Interestingly, the very provision cited by the district court as an example of "coastwise" modifying "route" rather than "vessel" in fact refers to both coastwise vessels and coastwise routes. See 46 C.F.R. § 90.05-7. While that provision is entitled, "Ocean or Unlimited Coastwise Vessels on Inland or Great Lake Routes," the text of the regulation reads as follows: "Vessels inspected and certificated for ocean or unlimited coastwise routes . . . ."

"coastwise," as used in the GSOT-2000's certificate of inspection, may be fairly understood to refer to a mileage-restriction.

ii) "Fair" weather

The district court held that, "[l]acking either a regulatory definition or proof of a [commonly] understood meaning [of `fair' weather], I must conclude that [Dana Marine] had considerable discretion to determine if the weather was `fair' for a particular voyage." We hardly believe the term "fair" weather is so vague or undefined that it relieves Dana Marine from liability for failing to apprise Burroughs of the certificate's weather restriction. This is not a case where an operative term is latently or patently vague or ambiguous. See, e.g., Frigalement Importing Co. v. B.N.S. Internat'l Sales Corp., 190 F. Supp. 116, 117 (S.D.N.Y. 1960) (Friendly, J.) ("The issue is, what is [`]chicken[']?"). Rather, "fair" weather is a word that, while lacking any precise definition in law or custom, possesses a core meaning about which reasonable persons could not differ -- at least in disqualifying certain types of weather as "fair."[13]

[13] The district court here was interpreting a term contained in a Government document whose issuance served to implement both federal statutes and Coast Guard regulations. See 46 U.S.C. §§ 3311, 3313 (requiring issuance of certificates by Coast Guard and compliance by issuee); 46 C.F.R. Part 91 et seq. ("Certificate and Inspection"). Therefore, we hold that the district court's interpretation of the term "fair weather" as used in the Coast Guard certificate was tantamount to interpreting a term of a regulation or statute -- a legal conclusion which we review de novo. Zapata Haynie Corp. v. Authur, 926 F.2d 484, 485 (5th Cir. 1991).

Because we hold that the district court erred as a matter of law in holding that "fair" weather was vague enough to afford Captain Burroughs discretion in interpreting the term, we must address de novo whether the conditions that prevailed qualified as "fair" weather under any objectively reasonable definition of the word. We are permitted to make such a factual finding on appeal because "the record permits only one resolution of the factual issue." Pullman-Standard v. Swift, 456 U.S. 273, 292 (1982). There is uncontroverted evidence about the extreme weather conditions that prevailed during the barge's voyage. The GSOT-2000 was exposed to thunderstorms and showers, twenty-five knot winds, and ten feet waves -- possibly reaching as high as fourteen feet -- for an extended period.[14] See supra Part I. A

[14] The district court found that maximum waves heights were only eight to ten feet, "perhaps higher with swells." Captain Burrough's log reported waves that reached twelve to fourteen feet. Dana Marine has repeatedly admitted that waves reached fourteen feet. The district court based its finding of eight to ten feet waves on the testimony of Langenfelder's expert Gagnet who, according to the court, "testified that estimations of the seas by people amidst them ought to be and were generally discounted by several feet to compensate for typical, but unintentional, exaggeration."

Our review of Gagnet's testimony indicates that he stated that an estimation of fourteen feet waves was perhaps a "little high" in view of the forecasts for eight to ten feet waves. Gagnet did not, as the district court claimed, state that wave height estimations made by a tug captain should generally be discounted by "several feet." The court below also neglected to mention that the Gagnet offered an alternative explanation for waves higher than those forecasted: "The fourteen feet [waves] could have been . . . an adverse wave, a combination of sea and swell, [or] could have been due to the thunderstorm activity within the front." When questioned by the court, Gagnet stated that waves will generally be higher than predicted during a thunderstorm. We accept the district court's finding that wave heights were generally eight to ten feet, although we underscore the court's finding that waves were "perhaps higher."

rational fact-finder could not possibly find that either the conditions that were forecasted or conditions that in fact prevailed constituted "fair" weather.[15] Indeed, Captain Burroughs himself testified that the wave conditions that prevailed beginning on November 15th -- in particular, waves over eight feet -- qualified as "bad weather."

iii) Was the district court's refusal to find negligence clearly erroneous?

In reviewing the district court's ultimate determination -- that Dana Marine's towage of the GSOT-2000 200 nautical miles into the Gulf into the reasonably foreseeable weather conditions

---

[15] Dana Marine argues that because the conditions that actually prevailed were greater than those predicted in the National Weather Forecasts, this Court must look only to the predicted conditions in determining whether Captain Burroughs complied with the "fair weather" restriction. Cf. Boudin v. Ray McDermott & Co., 281 F.2d 81 (5th Cir. 1960) (tug is chargeable with knowledge of available weather forecasts). We note that the conditions predicted were only slightly less severe than what in fact occurred. As discussed in supra Part I, the official National Weather Service Forecasts predicted seas of five to eight feet for November 15th, six to nine feet for November 16th, and seven to ten feet for early November 17th; winds were forecasted to be between 20 and 30 knots. Numerous showers and thunderstorms were also predicted. More importantly, extended forecasts issued as early as November 15th predicted "strong . . . winds and rough waves." In actuality, winds reached their forecasted speeds, waves reached at least ten feet -- possible higher -- between November 16th and 17th, and rains and thunderstorms occurred.

We cannot say that a rational fact-finder could deem the conditions forecasted to be "fair weather," especially in view of the extended forecasts of "strong . . . winds and rough waves." Moreover, according to his own logs, for at least a day before the accident occurred Captain Burroughs recorded wave heights that exceeded the available forecasts, yet he continued to tow the GSOT-2000 farther from the coast. Dana Marine's argument is thus untenable.

prevailing November 14-17, 1987, was not negligent -- we may reverse only for clear error. See Fed. R. Civ. P. 52(a); Consolidated Grain & Barge Co. v. Marcona Conveyor Corp., 716 F.2d 1077, 1082 (5th Cir. 1983) (district court's finding of negligence in admiralty case governed by clearly erroneous standard). We believe that the court's finding of no negligence was clear error. In view of the record as a whole, we are "'left with the definite and firm conviction that a mistake has been committed.'" Anderson v. City of Bessemer City, N.C., 470 U.S. 562, 573 (1985) (quoting United States v. United States Gypsum Co., 333 U.S. 364, 395 (1948). Dana Marine undoubtedly committed actionable negligence.

Our conclusion is primarily based on the district court's unwillingness to hold Dana Marine accountable for ignoring the Coast Guard's restrictive certification. See supra Part III.A.i & ii. Consequently, the court failed to apply the proper standard of reasonable care owed to Dana Marine. Both the "coastwise" and "fair weather" restrictions were relevant to the issue of the degree of care that Dana Marine owed to Langenfelder, as "[th]e degree of care required of a tug is measured with reference to the character of the tow and the condition of the seas and weather." Aiple Towing Co., Inc. v. M/V Lynne E. Quinne, 534 F. Supp. 409, 411 (E.D. La. 1982); see also National Transp. Corp. v. Tug Abqaip, 418 F.2d 1241 (2d Cir. 1968); The Mercury, 2 F.2d 325 (1st Cir. 1924); Collier v. 3 A's Towing Co., 652 F. Supp. 576, 579-80 (S.D. Ala. 1987); Dillingham Tug & Barge v. Collier

Carbon & Chemical Co., 548 F. Supp. 691, 697 (N.D. Cal. 1981); M.P. Howlett, Inc. v. The Tug Dalzellido, 324 F. Supp. 912, 916 (S.D.N.Y. 1971). Because Captain Burroughs was ignorant of the certificate, he was unaware of the character of the GSOT-2000, particularly its inability to withstand heavy weather on the open seas. Likewise, Captain Burrough's ignorance of the "inland" nature of the GSOT-2000 -- a fact known by Dana's Vice President Dreijer and thus imputable to Burroughs -- is relevant in this regard. See Port Ship Serv., Inc. v. International Ship Manag., 800 F.2d 1418, 1420 (5th Cir. 1986) (general agency principles applicable to admiralty cases)

"This Court has often held that violation of federal law or regulation can be evidence of negligence, even negligence per se." Lowe v. General Motors Corp., 624 F.2d 1373, 1379 (5th Cir. 1980) (citing cases). Although there are cases that specifically hold that a violation of a Coast Guard regulation constitutes negligence per se,[16] we need not rely on that precedent in order to find that Dana Marine was negligent. Rather, we believe that Dana Marine's violation of the Coast Guard certificate -- which in turn violated both a Coast Guard regulation and federal statute[17] -- was such probative evidence of negligence under

---

[16] See, e.g., Dougherty v. Santa Fe Marine, 698 F.2d 232, 235 (5th Cir. 1983) ("The failure to follow any Coast Guard regulation which is the cause of an injury establishes negligence per se."); Duty v. East Coast Tender Serv., Inc., 660 F.2d 933, 947 (4th Cir. 1981) (en banc) (same).

[17] See 46 C.F.R. 97.50-1 ("It shall be the duty of the master or other person in charge of the vessel to see that the provisions of the certificate of inspection are strictly adhered

traditional tort doctrine that a rational fact-finder could not have failed to find that Dana Marine was negligent. The certificates' restrictions imposed related duties which Dana Marine unquestionably breached -- the duty to sail near the coast and the duty to seek safe harbor the moment that the weather ceased to be fair. The latter breach of duty was exacerbated by Captain Burrough's failure to properly monitor the National Weather Service's forecasts.[18]

Our finding of negligence is supported by evidence that the tug captain who towed the GSOT-2000's sister barge, the GSOT-3001, followed a route close to the coast and repeatedly ducked into port whenever wave heights reached as little as four to seven feet. The district court refused to admit the logs of the captain who towed the GSOT-3001, ruling that they were irrelevant. Langenfelder argues that the logs were highly relevant because they evinced the actions of a "prudent navigator" performing a "similar service." Stevens v. The White City, 285 U.S. 195, 202 (1932) (standard of negligence under

---

to."); 46 U.S.C. § 3313(a) ("During the term of a vessel's certificate of inspection, the vessel must be in compliance with its conditions.").

[18] We note that our rejection of the district court's finding that Dana Marine committed no actionable negligence is possible without the need to consider the testimony of Langenfelder's experts Gagnet and Antrainer. The two men opined that Captain Burroughs should have followed a coastwise, fair weather route which would have permitted the tug to duck into port in order to avoid bad weather. In finding no negligence, the district court refused to credit their testimony. Our finding of a breach of duty is based primarily on Captain Burrough's failure to comply with the certificate's restrictions.

admiralty law). Dana Marine argues that the GSOT-3001's logs are irrelevant because the voyages of the two tugs are "apples and oranges. The barges, tugs, captains, time of year and weather were all different."

We review a district court's decision about whether to admit evidence under an abuse of discretion standard. See Jon-T Chemical, Inc. v. Freeport Chemical Co., 704 F.2d 1412, 1417 (5th Cir. 1983). In this case, we believe that the court abused its discretion by excluding the logs of the GSOT-3001's voyage. The logs were clearly relevant under Federal Rule of Evidence 401 ("`Relevant evidence' means evidence having any tendency to make the existence of a fact that is of consequence . . . more or less probable than it would be without the evidence."). Dana Marine is mistaken in arguing that comparing the voyages of the two barges is an apples-and-oranges comparison. The GSOT-2000 and GSOT-3001 were "sister barges," both shallow "inland" vessels of approximately the same dimensions; the barges were towed within two weeks of each other during November 1987; the logs from each barge's voyage indicate both barges were exposed to approximately the same weather conditions for at least part of their respective voyages; both were towed across the Gulf from New Orleans to an ultimate destination on the East Coast; both were towed by tug captains employed by Dana Marine; and, most importantly, the two barges were issued identical certificates of inspection by the Coast Guard.

B. Proximate Causation

Establishing negligence is not enough to impose liability; Langenfelder is also required to prove that Dana Marine's negligence was the proximate cause of the GSOT-2000's extensive damages. We note at the outset that Dana conceded below that "[t]he only explanation for this damage was that it resulted from the impact of the barge with the weather . . . ." And despite its conclusion about what qualifies as "fair weather," the district court likewise concluded that "no doubt" the "less than ideal [weather] . . . took its toll." However, the district court found three factors that prevented it from attributing proximate causation to Dana's actions.

First, the district court found that "the evidence is that the barge would have suffered the same damages" had the captain's route been "coastwise" according to Langenfelder's proposed definition, which this court has held to be the correct definition. Second, the district court found that the twelve-feet-deep inland barge was unseaworthy for a journey 200 nautical miles at sea under the weather conditions that caused the damage. Finally, the district court claimed that Langenfelder had violated Coast Guard regulations, leading the court to invoke "The Pennsylvania rule," whereby Langenfelder was required to prove that such violations could not have caused the accident. These findings and conclusions will be addressed in turn.

1. Would damages have occurred if a coastwise route had been taken?

The district court's finding that the GSOT-2000 would have suffered equivalent damage had it taken a route considerably closer to the coast is based on the court's finding that

> [t]he coastal forecasts predicted weather about the same as that offshore, and a course nearer to shore would have increased the barge's time of exposure, unless a port of refuge was taken. Having not established that this weather was not "fair weather," Dana Marine would not have been duty-bound to take a port of refuge. Captain Burroughs did not testify that he would have taken a port of refuge. (emphasis added).

Just as with a finding of negligence, a district court's findings concerning causation are factual findings for appellate review purposes. See Consolidated Grain, 716 F.2d at 1082. Accordingly, the clearly erroneous standard governs our review of the district court's finding that the GSOT-2000 would have suffered the same damages had it been towed coastwise. There are at least two obvious problems with this finding. First, the record flatly contradicts the claim that the National Weather Service's forecasts predicted "about the same" conditions 200 nautical miles offshore and within the twenty nautical mile perimeter, respectively. The evidence of weather conditions closer to the coast came from a meteorologist who testified about the conditions within a fifty nautical mile perimeter. The meteorologist described notably calmer conditions than those experienced 200 nautical miles offshore. He concluded that "[t]he coastal marine forecast[s] generally, as I stated in my report, were less [severe] conditions," most notably with respect to wave heights which were less "due to the water depth and closeness to the shore." This expert testimony, based on the

National Weather Service's official forecasts, which are part of the record, was uncontroverted.

Second, assuming that conditions 200 nautical miles offshore and twenty nautical miles offshore were equivalent, it was established supra that the court's refusal to exclude the weather conditions that prevailed in the instant case from the category of "fair weather" was clearly erroneous. Thus, the court clearly erred in finding that "[h]aving not established that this weather was not `fair weather,' Dana Marine [was] not duty-bound to take a port of refuge." It is without question that a corollary of the duty to sail only in fair weather is the duty to seek safe harbor when the weather ceases to be fair. The Coast Guard's requirement that the GSOT-2000 follow a "coastwise" route no doubt was for the purpose of assuring that safe harbor could be sought quickly in the event the weather ceased to be fair.

The district court further erred by implying that Captain Burroughs would not have, in the event of inclement weather, immediately sought safe harbor had he sailed along the coast, as instructed by the Coast Guard certificate. Captain Burroughs explicitly stated that, had he known about the Coast guard certificate, he would have followed a route along the coast. The only possible inference that a rational fact-finder may make from Burroughs' testimony is that he indeed would have sought safe harbor once the weather ceased to be fair.

Assuming Captain Burroughs had complied with the certificate's restrictions, a rational fact-finder could not find

that the GSOT-2000 would have suffered any appreciable damage. In this regard, we observe the uncontroverted evidence that the GSOT-2000 withstood rough wind and wave conditions for at least twenty-four hours after the weather ceased to be "fair" according to any reasonable definition.[19] Even if weather conditions within a twenty nautical mile perimeter from the coast unexpectedly became equivalent to the type that existed 200 nautical miles offshore, little if any damage could have been sustained during the brief time necessary to seek safe harbor.

Once again, because we are left with the definite and firm conviction that a mistake has been made, Anderson v. City of Bessemer, 470 U.S. at 574, we find clear error in the district court's finding that the GSOT-2000 would have suffered damages had it been towed coastwise and only during fair weather.

2. Unseaworthiness: A superseding cause?

Unseaworthiness of a tow ordinarily, if found to be a superseding cause of a tow's damage, absolves a tug of liability for any negligence. See King Fisher Marine Serv., Inc. v. NP Sunbonnet, 724 F.2d 1181, 1184 (5th Cir. 1984). However, an important exception to this general rule is that "a tug may be liable for the failure to exercise due care in operation of an unseaworthy vessel [so long as] . . . there be some notice to the

[19] As discussed in supra Part I, by November 15th, winds had reached 20-25 knots and wave heights had reached eight to ten feet, according to the captain's logs. The barge apparently did not sustain any significant damages until late November 16th or early November 17th.

tug" of the tow's unseaworthiness. South, Inc. v. Moran Towing & Trans. Co., 252 F. Supp. 500, 507 (S.D.N.Y. 1965), aff'd, 360 F.2d 1002 (2d Cir. 1966); see also Tidewater Marine Activities, Inc. v. American Towing Co., 437 F.2d 124, 130 (5th Cir. 1970); Cargill, Inc. v. C & P Towing Co., 1991 A.M.C. 101 (E.D. Va. 1990), aff'd, 943 F.2d 48 (4th Cir. 1991). Further, seaworthiness "is a relative term." May v. Hamburg-Amerikanische Packetfahrt Aktiengellschaft, 290 U.S. 333, 346 (1933). A vessel is seaworthy if it is "staunch to withstand the pressures that ordinarily accompany the intended voyage." Kingfisher, 724 F.2d at 1183 (emphasis added). Unseaworthiness is a question for the fact-finder and thus is reviewed on appeal under the clearly erroneous standard. See Haughton v. Blackships, Inc., 462 F.2d 788, 788 (5th Cir. 1972).

The district court found that the GSOT-2000 was unseaworthy. Specifically, the district court found that:

> the GSOT-2000 was not seaworthy for a voyage in the Gulf at this time of year. The evidence having failed to establish . . . a duty to move the barge along the coast, I must measure the barge's seaworthiness against a contemplated voyage that could justly be made directly across the Gulf [200 nautical miles offshore] . . . . A preponderance of the evidence establishes that the GSOT-2000 was not seaworthy for a Gulf voyage that included some risk of exposure to weather like that forecasted. (emphasis added).

Because Dana Marine was duty-bound to follow a coastwise, fair weather route, the district court's finding of unseaworthiness was the result of the erroneous legal assumption that the GSOT-2000's unseaworthiness was to be judged against the actual voyage taken rather than the one contemplated by the Coast

Guard's restricted certification. Consequently, the district court's subjecting the GSOT-2000 to a seaworthiness standard based on a voyage 200 nautical miles offshore during "strong . . . winds and rough waves" wrongly penalized Langenfelder for Dana's breach of its duty to avoid such inclement conditions. Indeed, the inclusion of the "coastwise" and "fair weather" restrictions in the Coast Guard's certificate was a recognition by the Coast Guard that the GSOT-2000 would not be seaworthy if it followed a non-coastwise route during weather that was not fair.

Because the district court applied an incorrect standard in assessing the GSOT-2000's seaworthiness, our review of this particular fact-finding is not circumscribed by the deferential clearly erroneous standard. See Landry v. Amoco Production Co., 595 F.2d 1070, 1072 (5th Cir. 1979). "[W]here the findings are infirm because of an erroneous view of the law, a remand is proper unless the record permits only one resolution of the factual issue." Pullman-Standard v. Swift, 456 U.S. at 292. In the instant case, however, we do not believe that remand is necessary on the question of the GSOT-2000's seaworthiness for its intended voyage since the record permits only one resolution of the factual issue.

We have carefully reviewed the evidence of the GSOT-2000's seaworthiness as of the date of its departure from New Orleans with regard only to a coastwise, fair weather voyage. In view of the record as a whole, a rational fact-finder could not have

deemed the GSOT-2000 unseaworthy for purposes of the circumscribed voyage mandated by the Coast Guard certificate. Our conclusion is based on a number of factors: uncontroverted evidence of the generally good condition of the GSOT-2000 prior to Langenfelder's purchase; the extensive repairs made by Langenfelder prior to departure, which largely remained in tact following the accident; Saucer's certification of seaworthiness; the Coast Guard's imprimatur given for a one-way coastwise, fair weather voyage;[20] Captain Burrough's testimony that the GSOT-2000 fared well in "strong . . . winds and rough seas" for a significant period of time before succumbing to the elements; and the undisputed evidence that the barge's journey from Tampa to

---

[20] A Coast Guard inspection is conducted to "ensure" a vessel's seaworthiness for a particular voyage or service. See 46 U.S.C. § 3315(a); 46 C.F.R. § 91.25-10(a). Although a Coast Guard certification is by itself not conclusive evidence of seaworthiness, it is probative evidence. See Valentine Waterways Corp. v. Tug Chaptank, 260 F. Supp. 210, 215 (E.D. Va. 1966); South, Inc. v. Moran Towing & Trans. Co., 252 F. Supp. 500, 506 (S.D.N.Y. 1965), aff'd, 360 F.2d 1002 (2d Cir. 1966).

As a matter of law, we reject the district court's finding that there was insufficient evidence to prove that the Coast Guard's certification was based on adequate information. The court's conclusion was based solely on the fact that copies of the GSOT-2000's repair invoices and audiogauge survey were not attached to the Coast Guard's report. Although a former Coast Guard inspector, Halsey, testified that attaching documents showing repairs was Coast Guard "policy," no other evidence of such an official "policy" was offered. In the absence of more reliable evidence that the inspector violated official Coast Guard policy and certified the GSOT-2000 after an inadequate inspection, we will adhere to the well-established judicial "presumption that officers charged with the performance of a public duty perform it correctly." See, e.g., Quinlan v. Green County, 205 U.S. 410, 422 (1907). Furthermore, we note that Ragas, who was in charge of overseeing the Coast Guard's inspection, testified based on personal knowledge that the inspector was present both during and after the repair process, thus witnessing the repair work firsthand.

Baltimore occurred without incident during normal weather conditions after only make-shift repairs. Therefore, we believe that "the record permits only one resolution of the factual issue," Pullman-Standard, 456 U.S. at 292 -- the GSOT-2000 was seaworthy for purposes of a coastwise, fair weather voyage.

We observe that, in order to reach this result, we need not find clear error in the district court's determination that 17 of the 33 thin spots detected by the audiogauge remained in the GSOT-2000's hull even after Saucer's repairs.[21] Although ordinarily such a factual dispute would necessitate a remand to the court below for further fact-finding, see Pullman-Standard, supra, we do not believe that a remand is required in the instant case.

It is undisputed that the primary structural damage was sustained by the hull plates in the No. 2 tanks, one of which was

---

[21] Langenfelder strenuously disputes this finding and argues that there is absolutely no basis in the record for it. Langenfelder contends that only 2 of the 33 thin spots were not double-plated. Our review of the record indicates that 15 of the 17 thin spots identified by the district court run along the outer edge of the two-dimensional diagram of the GSOT-2000 showing the results of the audiogauge; two thin spots were in the hull of the stern. The heart of this dispute seems to be whether the thin spots on the outer edge of the diagram depict portions of the hull plate under the vessel or instead depict thin spots which were later covered by the double-plating of the bilge knuckles, which ran along the barge's starboard and port. The district court apparently believed that the 15 thin spots were in hull plates under the vessel; Langenfelder counters that these 15 spots were covered by the new bilge knuckles. Only a three-dimensional depiction of the results of the audiogauge survey would resolve this. If Langenfelder is correct, then the district court's finding that 15 spots remained below the .281" requirement is clearly erroneous. Langenfelder does not dispute that the two thin spots in the stern remained under .281".

completely lost in the storm. However, the audiogauge survey revealed that the hull plates underlying the No. 2 tanks were well above .281", which the district found to be the minimum thickness required by the Coast Guard.[22] Thus, even if 17 of the 33 thin spots indeed were below .281", the district court is clearly erroneous in concluding that the GSOT-2000's supposed unseaworthiness absolved Dana Marine from any liability. Unseaworthiness absolves a tug from liability for its negligence only when the tow's unseaworthiness was the superseding cause of the damage. See Detyens Shipyards, Inc. v. Marine Indus., Inc., 349 F.2d 357, 358 (4th Cir. 1965). That is, as the district court itself recognized, "[a] tug owner is not liable for damages resulting from the unseaworthiness of the tow," (emphasis added), citing Ryan Walsh Stevedore Co. v. James Marine Serv., 557 F. Supp. 457, 460-61 (E.D. La. 1983), aff'd, 724 F.2d 1457 (5th Cir. 1984). In the instant case, none of the areas of the hull where the audiogauge detected thins spots were damaged at sea. Therefore, even if the GSOT-2000's hull possessed thin spots which rendered it unseaworthy for some purposes, that unseaworthiness did not cause the GSOT-2000's damages sustained

[22] We note that the district court's conclusion that .281" was the minimum thickness required by Coast Guard regulations was based on expert testimony from Halsey regarding what is required for seagoing barges. We have previously held, however, that the district court erred by holding the GSOT-2000 up to standards for seagoing barges. There was no testimony or evidence at trial regarding the minimum hull thickness required for inland barges such as the GSOT-2000.

at sea. Rather, portions of the hull which indisputably were above .281 were damaged by stress from the extreme weather.

We also find clear error in the district court's finding that Saucer's extensive double-plating did not add any hull strength. The district court based this finding solely on Halsey's speculation that the absence of an itemized charge by Saucer for permanent "plug" welds meant that Saucer instead used temporary "fillet" welds. The finding that the double-plating added no hull strength is strongly belied by uncontroverted portions of the record -- namely, that Saucer's double-plating was found to be unscathed after the accident, while the primary damage occurred in the No. 2 tanks, which at the time the GSOT-2000 was purchased were not in need of double-plating. It is especially notable that Archie Jordon, the marine surveyor who examined the GSOT-2000 in Baltimore, offered an unchallenged expert opinion that the No. 2 tanks' original hull plates' plug welds failed as a result of the stress at sea. There is no other reasonable explanation why the many thin areas of the bow and bilge knuckles (covered by double-plates) remained intact, while the nearby No. 2 tanks (which did not require any double-plating and which possessed original plug welds) suffered the bulk of the damage, except that the double-plating did indeed add hull strength. Because the district court's finding to the contrary has absolutely no reasonable basis in the record, we hold that it was clearly erroneous. See Anderson, 470 U.S. at 574 (where

district court ignores the only "permissible view[] of the evidence," court's finding is clearly erroneous).

Similarly, we reject the district court's finding that the GSOT-2000 was unseaworthy in part based on the court's attribution of fault to Langenfelder for the Butterworth hatch that blew open at sea and caused severe flooding. The court gave no explanation for attributing fault to Langenfelder rather than to Dana Marine. The uncontroverted evidence reveals that Saucer Marine,[23] the Coast Guard, and Captain Burroughs specifically inspected the GSOT-2000 to insure that all hatches were tightly secured. A serious defect in a hatch would have thus been apparent. Langenfelder's expert, Antrainer, testified that the hatch blew open as a result of the internal pressure caused by the severe pounding by the waves. Because Dana Marine had a duty to tow the barge in fair weather, the only permissible view of the evidence is that a hatch would not have blown open but for Dana Marine's towage of the GSOT-2000 into the heavy weather. Again, the district court clearly erred.

3. Application of The Pennsylvania rule

Although the issue was never raised by the parties in the proceedings below, the district court sua sponte held that Langenfelder violated Coast Guard regulations. In discussing the issue of causation, the court pointed to those putative

[23] According to Saucer's repair invoices, workmen spent sixteen hours battening down all the barge's hatches.

regulatory violations as a basis for invoking "The Pennsylvania rule." That long-standing admiralty doctrine creates a strong presumption that a party in a maritime accident legally caused it if that party violated a statute or regulation intended to prevent such an accident. See The Pennsylvania, 86 U.S. (19 Wall.) 125 (1874). The rule shifts the burden to the violator, who "must prove not just that its [statutory or regulatory] violation probably was not, but in fact could not have been a cause of the collision." Pennzoil Producing Co. v. Offshore Express, Inc., 942 F.2d 1465, 1472 (5th Cir. 1991); see also Candies Towing Co. v. M/V B & C Eserman, 673 F.2d 91, 93 (5th Cir. 1982) (The Pennsylvania rule "impose[s] a substantial burden upon the party at fault to prove its innocence"). "Although in its original form the rule of The Pennsylvania only applied to collisions between ships, it has been extended in this Circuit to apply to a variety of maritime accidents and to parties other than vessels." Pennzoil, 942 F.2d at 1472.

The district court's application of the rule to Langenfelder rather than to Dana Marine was based on the court's finding that the former failed "to have the barge surveyed [by the Coast Guard] before it was repaired in New Orleans and Tampa," as allegedly required by 46 C.F.R. § 91.30 ("Inspection After the Accident"). Because the district court's ruling turns on the application and meaning of a regulation, it is subject to de novo review by this Court. Zapata Haynie Corp. v. Arthur, 926 F.2d 484, 485 (5th Cir. 1991).

As Langenfelder argues, this was a curious holding for the court below to make. The plain language of that regulatory provision makes it crystal clear that it only applies to surveys after repairs, not pre-repair surveys, as the district court claimed.[24] It is evident from the record that the Coast Guard did indeed survey the GSOT-2000 during and after the repairs at Saucer Marine. A certificate of inspection was issued, and the Coast Guard inspector concluded that the barge "in all respects [conformed] with applicable vessel inspection laws and regulations." As for Langenfelder's supposed violation of 46 C.F.R. § 91.30-1(a) when the barge was being repaired at Tampa, any regulatory violation there occurred after the damage was inflicted in the Gulf. Thus The Pennsylvania rule is inapposite to any violation that occurred in Tampa. Accordingly, we hold that the district court erred as a matter of law in applying The Pennsylvania rule to Langenfelder.

Langenfelder not only disputes the trial court's application of The Pennsylvania rule, but also argues that, if anything, the rule should be applied against Dana rather than on its behalf.

---

[24] 46 C.F.R. § 91.30-1(a) reads, in pertinent part:

> A survey, either general or partial, shall be made every time an accident occurs or a defect is discovered which affects the safety of the vessel . . . or whenever any important repairs are made. . . . The survey shall be made to insure that the necessary repairs have been effectively made . . . and that the vessel complies in all respect with regulations in this subchapter" (emphasis added).

Because the record makes it clear that Captain Burrough's towage of the GSOT-2000 into heavy weather proximately caused the barge's damages, we need not reach Langenfelder's argument based on The Pennsylvania rule.[25]

C. Damages

Because Langenfelder has established three of the four elements of a negligence action -- duty, breach, and causation -- all that remains is the issue of damages. Langenfelder seeks a total of $150,782.53.[26] Langenfelder also seeks interest from the date of the accident and costs for trial and appeal.

Dana Marine argued below that, because that the fair market value of the GSOT-2000 immediately prior to the accident was considerably less than the amount that Langenfelder spent on permanent repairs, damages must be assessed under the "constructive total loss" doctrine.[27] Under that well-

---

[25] However, as we held in supra Part III.A.iii., Dana Marine violated both regulatory and statutory provisions, which were arguably intended to prevent the very type of accident caused by Dana Marine's negligence.

[26] This represents $122,144.00 in total permanent repair costs (repairs in Baltimore); $524.48 for painting; $4,282.80 in temporary repair costs (repairs in Tampa); $423.33 for Tampa port charges; $1,727.67 for drydocking the barge in Tampa; $3,725.00 for sea taxi charges in Tampa; $1,586.50 in expenses resulting from a Langenfelder official's trip to inspect the damaged barge in Tampa; and Dana's extra charge of $14,368.75 for the delay in Tampa.

[27] The district court did not actually formally assess damages -- since it found that Dana Marine was not liable -- although the court gratuitously made extensive findings about the value of the GSOT-2000. We will accept those findings and render judgment so as to obviate a full remand on the question of

established damages theory, Langenfelder may only recover the fair market value of the barge immediately before the accident, minus the salvage value of the barge after the accident. DiMillo v. Sheepscot Pilots, Inc., 870 F.2d 746, 752 (1st Cir. 1989); B & M Towing Co. v. Wittliff, 258 F.2d 473, 475 (5th Cir. 1958). Because we find no clear error in the trial court's finding, based on expert testimony, that the fair market value of the GSOT-2000 prior to its ill-fated departure was $50,000, we will accept that figure. Likewise, we are unable find clear error in the district court's finding that the scrap value of the GSOT-2000 was $15,000 after the accident. Therefore, under the constructive total loss theory, Langenfelder is entitled to $35,000 for the damage to the barge.

Langenfelder has also sought incidental damages. See Restatement (Second) of Contracts, § 347(b) (1981). While the $124,114 in permanent repair costs is excluded under the constructive total loss theory, certain types of temporary expenditures that Langenfelder was forced to make in Tampa are recoverable. In DiMillo, a case with facts remarkably similar to the instant case, the First Circuit noted in dicta that in a constructive total loss case, "[t]emporary repairs, of an emergency nature, necessary to minimize damage, evaluate condition, conserve the property, or effectuate compliance with the safety statutes, might be recoverable in a proper case as incidental damages." 870 F.2d at 752 n.4.

---

damages.

We find that the following expenses incurred in Tampa were necessary incidental expenses: the port, dry-docking, and sea taxi charges, as well as Langenfelder's expenses in sending a company official to inspect the damaged barge. The total of those expenses is $7,462.50. The $4,282.00 spent on temporary repairs in Tampa is not recoverable because, under the constructive total loss doctrine, once the GSOT-2000 was towed into port and the damage was assessed, the barge should have been scrapped because repair costs ultimately surpassed the fair market value of the barge before the accident. We further hold, under a theory of restitution, see Restatement (Second) of Contracts, § 371(b) (1981), that the $14,368.75 that Dana charged Langenfelder for the Tampa delay -- an amount additional to the original $33,000 towing fee -- is recoverable. It is necessary to disgorge that amount, since otherwise Dana Marine would be unjustly enriched by charging for a delay caused by its own negligence. Thus, the total damages in addition to the $35,000 are $21,831.25, making Dana Marine liable for a total of $56,831.25 irrespective of interest and any costs allowable under law. We are permitted to make these factual findings on appeal, as the evidence of the incidental and restitutionary damages is uncontroverted. See Pullman-Swift, supra.

Interest should be awarded from the date of the accident. Platoro Ltd. v. Unidentified Remains of a Vessel, 695 F.2d 893, 906 (5th Cir. 1983). Awarding costs is within the discretion of the district court, Holden v. S.S. Kendall Fish, 395 F.2d 910,

913 (5th Cir. 1968), although costs do not include attorneys fees, which the parties bear themselves, Noritake Co. v. M/V Hellenic Champion, 627 F.2d 724, 730-31 (5th Cir. 1980).

IV.

Accordingly, in view of the district court's numerous clearly erroneous factual findings and flawed legal conclusions, we REVERSE and RENDER JUDGMENT for Langenfelder. The matter will be remanded to the district court for the limited purpose of assessing the amount of pre-judgment and post-judgment interest allowed by law and also awarding Langenfelder such costs as may be taxed below. Dana Marine shall bear the costs on appeal.