

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK

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In the Matter of the Complaint of: :

RATIONIS ENTERPRISES, INC. OF :
PANAMA, as Owner, and :
MEDITERRANEAN SHIPPING CO. :
S.A. OF GENEVA, as :
Bareboat Charterer :

OPINION AND ORDER

: 97 Civ. 9052 (RO)

of the *MSC CARLA* for Exoneration from or :
Limitation of Liability. :

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OWEN, District Judge:

On November 24, 1997, the *MSC Carla*, a fully-loaded 900 foot containership, was on a voyage from LeHavre to Boston following a recent month-long dry-docking with a "Special 25 Year" Survey by Lloyd's Register at which time over 100 men did a lot of work on the vessel and Lloyds' issued a clean certificate of class.

The first days of the voyage were uneventful. The *Carla* had loaded cargo at various ports such as Hamburg, Bremerhaven and left LeHavre for Boston on November 21. The vessel was properly loaded and its stability was satisfactory. Captain Giuseppe Siviero, an experienced master, described the *Carla* as being in good to optimum condition. On November 24, however, weather conditions began deteriorating and wind speed increased steadily until by 4 o'clock that afternoon wind from the west reached force 10 or 11 on the Beaufort Scale, approximately 55 to 72 miles per hour, with wave heights of 11 to 12 meters. The vessel's heading was 250 degrees with seas coming at its starboard bow at an approximately 20 to 40 degree angle and swells from a previous

storm coming at its port bow from a southwesterly direction. Thus, approaching from different directions, the storm waves were confused. At 6 o'clock, the vessel suddenly rolled heavily--about 25 degrees--several times and then steadied somewhat. These several rolls, in addition to tossing and breaking all the dishes in the crew dining room, caused all three engines--the major center one and two side engines--to stop running because of lack of oil pressure. The engineer was shortly able to get the center engine going and the *Carla* continued on its 250 degree course but at minimal speed.

Shortly after regaining power on its central engine, the *Carla* encountered the first of at least two large, steep waves. Captain Siviero (through an interpreter) testified as to what happened thereafter:

Q. Now what happens after 1830 hours?

* * *

A. Well, of course the first thing we did was we tried to put a little bit of order because of everything having been thrown all over the place, and to try to put the situation, the conditions was they were prior to that incident of rolling. And of course the engineer below was trying to get the two side engines started again. As we were adjusting and increasing the pitch, of course we were gaining a little bit more speed . . . six maybe seven knots, because it's only one engine. We started climbing a wave, and you could see that the bow light kept coming up and up and up and up, and I could see that the ship was going up this wave.

Q. And then what happened?

A. So I was trying to judge how big this wave was by the inclination of the ship, and I noticed that the bow light was lower than where one would expect it to be in relationship to the pitch of the ship. (Tr. 122-23).

* * *

Then as we started going down the other side of this wave, . . .the ship made a very strange motion as if it had wanted to screw itself into the wave. . . I heard a very sharp hit, impact, and of course the noise had been carried through the hull, but a

very sharp staccato noise, and then going up this second wave, and I noticed that there was something absolutely wrong. As a matter of fact my first officer, I noticed that the bow was going down. The ship was going up, the bow was going down, and the first officer was saying we've broken apart, we've broken apart and I was able to see. I immediately ran out to the wing on the observation wing and what I noticed is that this part, the bow was actually separating itself to port, away from the rest of the ship. And we broke apart. (Tr. 123-24).

* * *

Q. When did it break?

A. On the first wave. Here is hogging started, to crack here. When it go down, the big shock break, go up again, split. (Tr. 130).

* * *

Q. What happened after that?

A. The wave passed, the impact passed also, went away, of course. When we went -- so, there was the impact. The impact stopped. The wave passed over us¹ but we started going up that wave and that's when the ship broke. That's when it separated, split. (Tr. 129).

* * *

Q. In your opinion, captain, based on being up on the bridge on November 24th at approximately 1830 hours, at what point did the ship begin to break in half in events, over the series of waves that he has just talked about?

A. I would say that the ship started breaking apart on top of the first wave That's when I believe that the cracking started.

Q. Captain, exactly why do you think it cracked at that particular moment, at the top of the first wave?

A. Because we saw that the bow light had started to lower itself relative to the position where it should have been, and the line of containers, the surface of containers was not in line with the containers aft of them. They had shifted as though they had shifted position, because they were lower. (Tr. 124).

* * *

¹ The captain testified elsewhere that ["Heavy spraying reached right up to the glass of the cabin."]

The hull of the *Carla* broke apart roughly in a complete circle at or just in front of the welding at the back of a 15 meter elongation section defendant Hyundai Corporation ("HC"), had built and inserted in its mid section in front of the bridge some 13 years earlier. The front half of the vessel moved to port and fortunately the captain was able to turn the stern half of the vessel (with the rudders) to starboard and thus avoided hitting the separated forebody. The front half, over 5 days, slowly filled up with water and sank. The stern half was towed to Los Palmas Island, the cargo unloaded, then towed to Gijon, Spain, where it was scrapped.

Going back those 13 years to February 20, 1984, HC, involved in the ship building services, entered into a ship elongation contract with the then-owner of the vessel, Brostrom Shipping Co., Ltd., under which HC, identified as the "contractor," undertook to lengthen the NIHON, as the *Carla* was then named, by adding approximately 15 meters length in its middle in accordance with its plans and specifications annexed to the contract. Bostrom was to pay HC some \$2,000,000 for the work with liquidated damages under the contract of \$25,000/a day for failure to deliver the vessel by the 25th day delivery date.

HC obtained the builders' risk insurance. HC did not perform the work but delegated it to its shipyard, specifically Hyundai Mipo Dockyard ("HMD"). HMD fabricated the new midbody section in its shipyard in Ulsan, Korea. It cut the vessel in half, put in the new midbody which was then joined by welding to the old aftbody and forebody. In addition to the work on the NIHON, HMD was more or less simultaneously

doing three other lengthening projects for the group of which Brostrom was a member, and as to one, the M/V JUTLANDIA, HMD's work on that vessel overlapped with its work on the NIHON by approximately twenty days. Consequently, from the trial testimony, it appears that the many labor demands on HMD were causing the JUTLANDIA to be nine days behind delivery schedule and the NIHON (now named Carla) three days behind schedule. To avoid or minimize liquidated damages under the contract, HMD contracted with quite a number of outside welders to supplement HMD's welding staff but their quality, as I conclude here, had disastrous consequences thirteen years later.

Six months after the NIHON's delivery, it was discovered that all 76 butt welds to the doubler straps on the deck of the *Carla* were deficient and HMD acknowledged to officials at Lloyd's Register in early June of 1985 that the outside welders brought in had done a poor job. The doubler straps referred to, three on each side of the deck for much of its length, to be made continuous, were to be welded between each section with what is called *full* penetration welds. This requirement, imposed by Lloyd's Register, was to provide adequate deck strength especially across the newly-installed midsection. Normally, it appears HMD's welders did their work in the shop which would have made it easy to do a two-sided transverse butt weld bottom to top. Instead, here, HMD elected to install the doublers plate by plate onto the deck. As a result, the welders not being able to come up from the underside, failed to do "full penetration welds" which obviously markedly weakened the straps which were there to strengthen the deck while the vessel

would be bending and turning in waves.² It also appears that for the 60 HMD welders Lloyd's Register had only one hull surveyor present and he did not have the ability to observe every weld. One of HMD's top vice-presidents acknowledged that HMD's quality assurance department did not radiograph all of the welds to ensure they were of good quality. Instead it appears HMD decided to only perform random radiographic inspections which did not catch a number of faulty welds. How many were missed and

² At some point, during the warranty period, this problem soon came to light in an inspection in Pusan. As an HMD witness Man Jin Yoon testified:

Q. What did you conclude from that inspection report?

A. Well, that inspection report does say that there are lack of penetration and some slag inclusion.

Q. What's slag inclusion?

A. Slag is a kind of unnecessary material inside the welding . . . (Tr. 1674).

This problem, which was communicated somewhat to the shipowner, was apparently not emphasized, and was indeed played down and not followed-up by HMD.

THE COURT: Mr. Yoon, I don't know anything about building ships so you will forgive me for putting this question to you this way. But when you have a report of lack of penetration and slag inclusion do you think of that in terms of it being something that could put the ship at some risk of damage? Are you troubled when you see that?

THE WITNESS: That's purely depends on the size or quantity.

THE COURT: In this case you get a report that these two things exist. Does that make you say, uh-oh, we got a problem on our hands here?

THE WITNESS: My personal, no, sir.

THE COURT: No. OK. Because then if you said we did, and you tell the owner this is what we got and the owner doesn't come back to you, you then might be saying to yourself, hey, owner, we called this to your attention and you got to pay some attention to it.

Do you feel a duty on yourself to follow up and say why aren't you doing anything?

THE WITNESS: Well, as far as I know this matter has been discussed even before we are at Pusan inspection. So I believe they have some deep discussion between owners and Lloyd's as professional organizations and we waited until they come up to us.

THE COURT: But they don't come up to you. So at some point you say well, if it doesn't bother them it's not going to bother us either, right?

THE WITNESS: Yes, at that time personal I was not as work as project manager and I left this project and returned to my original position.

THE COURT: So you really don't know the answer to what I am asking?

THE WITNESS: No, sir. (Tr. 1676-78).

unexplained is not clear. This, in addition to the new doubler joints not being staggered relative to the joints of the plates of old body part, made it even weaker (*see, infra*).

Also, a substantial number of design and construction flaws were concentrated in a relatively small area. The most significant of these was a cavity of an undetermined number of inches in length and irregular in shape where there should have been solid welding where the deck and the starboard topside joined at the rear of the inserted section. This should never have existed. And not only did the cavity increase the stresses in that area but welding irregularities – high and low points of welding material inside the cavity – also created additional points of stress.³

Next there was a 7 mm gap from a misalignment of a sheer strake plate and the deck plate at one point. This misalignment was purportedly compensated for by the welders filling the gap with welding material but which, according to engineering testimony in fact increased stresses at that point. Further, as mentioned above, in a number of places there was a failure to have the doubler welds “bridge” the erection joint weld. In homely terms, this is like a bricklayer building a brick wall by putting one brick one exactly on top of another without alternating the bricks. In some cases there was insufficient beveling on the deck plate, meaning the HMD workers beveled at a 25 degree angle from the vertical where drawings specified 45 degrees, which made it impossible for welders thereafter to fully insert a welding tool into the crevice for a full penetration weld. Many butt welds also contained slag which weakened their ability to bear loads

³ There was no such cavity left on the port side.

that they were designed to carry.

Joseph Winer testified as an expert for the plaintiffs' interests and was personally involved in supervising the lengthening of a number of vessels over the years. He went aboard the *Carla's* aft section the moment it was towed to Los Palmas immediately after the break-up in December 1997 and visited it later four times over a one year period in Gijon, Spain. He concluded that quality assurance was lacking and that the inspection practices and procedures were inferior which permitted defective welds to go uncorrected. He faulted HMD's planning, particularly as to the design and construction of the deck doublers.

Winer, after being very specific about the defects in the workmanship by HMD's welders, testified that from the observations and measurements he made aboard the vessel the ship failed on deck, and the fracture ran around the perimeter of the vessel's hull. He testified:

Q. Which of those two occurred first, crack in the starboard torsion box structure or failure at the bottom?

A. The crack in the starboard torsion box structure.

* * *

Because the crack under my conclusion traveled from the box girder, the torsion box down the side of the ship until it reached that heavy structure which extends up from the bottom of the ship to five meters above. That's coincidental with the turn of the bilge. And looking at Exhibit 126A, the five meter above baseline is precisely where the heavy structure starts. As we can see over the side, all the heavy structure is over here. The heavy structure goes up to this point here. So the fracture traveled easily down between the transverse frames. But when it got to this point it stopped, and I guess the initial hinging point was the entire lower structure. And then that separated and not in one motion but I think in several

episodes the crushing of these lower port and starboard bilge regions occurred and occurred, and the final hinging caused the tank top to fracture in tension and the ultimate hinge with the separation of the hull at the bottom of frame P. (Tr. 774-75).

Winer also testified, confirming the break at the deck, that the pivoting was at the bottom at the tank top plate; since across the bottom it was "folded down and broken. . ." whereas if the break had occurred at the bottom, it would have been "shoved under".

Dr. Charles Cushing, another expert witness for plaintiffs with a substantial background in naval architecture and marine engineering including supervising more than twenty conversions of ships by lengthening, personally examined the rear section of the *Carla* at Las Palmas and Gijon. He testified:

So what we have at the outboard edge of the erection butt -- where the two ships, the new midbody and the old forebody were attached -- is an arrangement represented by this diagram that shows the fillet weld, a massive amount of welding as we show in the photograph, a massive amount of welding that extends over to the region and connects up with the heat-affected zones of the fillet welds.

And then of course, the concentrations that we have discussed so many times in the last -- yes, the cavity. And then the stress concentrations that are also caused by the defective welding that include undercut, overlap, excessive crown, all of these are stress concentrations.

And, in addition to that, because of the size of this particular weldment -- and it's pretty massive -- taking the doubler at the top, the deck and the side, this is a lot of concentrated welding that creates residual stresses.

When you, as you described earlier, your Honor, melt the steel and melt the electrodes to get them to bond together, and then they cool, in the cooling process they create a lot of internal stresses. Those are called residual stresses. And this whole corner where you have very heavy welding builds up these residual stresses. And there is no way of knowing the quantity of those stresses, but it's known that it's a high amount.

Added to those residual stresses are the normal longitudinal bending stresses that a ship experiences that are in the deck and in the doubler. There are transverse stresses. The ship is twisting. There are torsional stresses, and there are shear stresses in the ship. So this corner, with all of these concentrations, are expected to carry all of these different stresses, not only the longitudinal but the other ones.

And then finally, in this particular corner, because of the massive amount of material in there you have what are called triaxial stresses. (Tr. 963-64).

* * *

From personal observation Cushing stated:

A. Well, I think that the most powerful evidence in the case is obviously the appearance of the fractured end of the ship. First the appearance of the vessel across the deck and down the sides, this somewhat clean break in the ship.

The next would be that when the ship was on the beach in Gijon, the appearance of the bottom of the ship with the crushing that existed down at this hinge but very localized, the absence of this crushing damage in the open area between the two wing tanks, in the cargo hold there was an absence of crushing except for some cell guides which were I think – which I think can easily be explained by the fact that there were nearly 100 containers in that hold, each of them weighing anywhere up to 20 tons, collapsing.

Q. In making that statement, are you relying on the visual evidence seen in Plaintiff's Exhibit 213-1?

A. Yes, sir.

Q. Go on please. I'm sorry.

A. And then of course, the absence of what could be the characteristic of wrinkling or crushing along the sides of the ship in the various photos on the stern end, and then there were salvor's photos that are available that also show a lack of this crushing or wrinkling up the side of the ship on the forebody. (Tr. 987-88).

Cushing concluded:

And then of course as you work your way around, there were very obvious defects as shown in this macro photograph of overlaps and excessive crowns which are all stress risers. The massive amount of welding is a stress riser.

But the thing that was to me the most interesting about this corner here is that this is one of the crucial corners on the ship. You don't play around with the top of the sheer stake. That's the source of fracture on so many ships, is problems occurring in this connection and in this corner.

THE COURT: How does that happen? Why is it?

THE WITNESS: Well, this is supposed to be, if I can mark this, this is supposed to be right out to the side like this.

THE COURT: I understand. Why if you fill it up with welding material does it become one of the weakest places in the vessel?

THE WITNESS: Because there was an obvious misfit of this plate. What happens in shipyards –

THE COURT: Where is this weakness conveyed to the vessel because of that?

THE WITNESS: Because in this area, in this whole area is welding that should have been roll plate of homogenous characteristic, but instead somebody's in there filling and filing and filling adding a lot of residual stress.

THE COURT: But you say this has caused a lot of problems on a lot of vessels and where does it start breaking a lot of vessels?

THE WITNESS: Right here. (Tr. 933-34).

* * *

THE WITNESS: If somebody welds something onto here and leaves a stress concentration all the Liberty ships – I shouldn't say all, many of the Liberty ships and the T2 tankers during World War II, that was a contributing factor. They had problems here.

THE COURT: What kind of problem, pick up the weld?

THE WITNESS: Because it is such a constrained and stressed area, if you had a stress concentration to what is already a constrained area it triggers the fracture.

THE COURT: I understand, doctor - where does the fracture occur? . . .

THE WITNESS: It occurs usually where the defect is. If the defect is in the weld here, it will start there. If you have a sharp corner at the top it will start there. But it is right wherever the defect is and the concentration is.

THE COURT: I'm sorry – I'm not, I can see from what I have heard from the witnesses so far that if you have bending and twisting of the vessel and there's a hole that's going to cause all kinds of problems around that hole.

THE WITNESS: Yes, sir. (Tr. 935).

Dr. Cushing concluded clearly that the welding defects of HMD added residual stresses to the starboard sheer strake and deck area, and that these "welding defects" were enough when added to other normal stresses so as to cause the ship to break in half....

THE WITNESS: Because the process of welding adds residual stress that could be as high as 50 to 80 percent of the yield of the material. You are locking in very high stress. You only have to add another 20 percent to the ship before it leaves the shipyard in order to have it yield. So by putting massive amount of welding up here you are putting residual stresses in there that stay there, and those stresses are locked in.

THE COURT: When it breaks where does it break?

THE WITNESS: For wherever you put the additional problem, the additional stress concentration, such as a tip in the cavity would be stress concentration. Or these excessive crowns or some of the other welding defects are enough to add to all of these other things to cause it to fracture. (Tr. 936).

Plaintiffs' metallurgist, Dr. John E. Slater, testified as follows:

Q. Dr. Slater, were there any other defects or flaws that you observed?

A. Yes, there were, Mr. Olson. And this if you like is a sort of package. What I have discussed previously is the fact that there was a lack of penetration in the doublers that led to fatigue cracking in the doublers.

Now, if you look at the fracture as it runs across the vessel on the starboard side we note that the deck fracture specifically in the weld area, which is shown in 228B, is very close to the fatigue fractures that occurred in the doublers. In other words, what we have is a very close juxtaposition between the doubler butt weld and the deck butt weld.

Now, when we start looking at the deck butt weld in this failure area which extends a significant distance in this fracture we note that the weld itself has failed in a low ductility manner, in quite a brittle appearing manner, and that the fracture is associated with the heat effected zone of the weld.

Now, this is an undesirable situation. When you put a weld in a component you do not want any type of fracture or anything else to occur actually in the weld or the weld heat affected zone.

In fact, when a weld procedure is written it is typical for a tensile test to be performed right across the weld through inter-bas metal and you want the fracture to occur in the base metal.

And the fact that we have here a problem with the weld which is allowing a fracture in a low ductility manner through the weld heat affected zone in my opinion is a significant problem here because it clearly is a plane of weakness the structure.

What I am trying to say is we sort of got a level of three situations here. We have, first of all, the doublers that have a lack of penetration; we have the doublers that failed by fatigue; the doubler weld, which has now fatigued is very close to the deck plate weld which itself has a defect in it from the viewpoint of fracturing in the weld heat affected zone.

So what you really have is this sort of unholy trinity if you like of three situations occurring: Bad welding in the doublers leading to fatigue, juxtaposition of the butt welds in the doublers, and the butt weld in the deck and failure of the deck probably due to stress transfer after the doublers have already failed in this weld heat affected zone. (Tr. 301-03).

Of confirmatory significance to all of the above were the existence along the break at the point where the starboard topside and the deck met (*see p.7, supra*) of certain "chevrons" -- like private first-class chevrons -- in the tear of the metal both leading up

the topside to the hole and across the deck to the hole. A number of these chevrons not far apart from each other, both pointed at where the experts say the "brittle fractures initiated."

THE COURT: [interrogating Dr. Slater] You are in effect telling me that these chevrons are pointing and saying "he did it, he did it, he did it" right?

* * *

THE WITNESS: Yes. I'm saying that the chevrons are pointing to an area where those brittle fractures initiated.

THE COURT: Where it started?

THE WITNESS: Yes. (Tr. 318-19).

* * *

THE WITNESS: Well, we know that the chevrons point back towards the area where that brittle fracture in fact started. We know that this brittle fracture started on either side of this area which contains the weld cavity. (Tr. 321).

* * *

THE COURT: And that caused the chevrons?

THE WITNESS: And then the brittle fractures arose and the chevrons formed. Which is why I call the cavity and the area around the cavity an initiating point for the fracture. (Tr. 322).

Even HC's metallurgist David Hughes acknowledged that a defect can cause a brittle fracture if the overloaded conditions are correct.

Given all the foregoing, I am completely satisfied by more than a fair preponderance of credible evidence that this vessel broke apart starting at the point of the negligently created cavity where the starboard topside and the deck met at the juncture between the back of the HC insert and the forward edge of the rear section of the vessel.

The break then ran across the deck and down both topsides. This is not only based on the first hand observations of the captain, but on all the -- for lack of a better overall term -- metallurgical "evidence" that the fracture left behind, i.e., the hole, the chevrons pointing to the hole, and the absence of wrinkles or accordion pleats in the topsides, both starboard and port.⁴

Virtually none of these serious welding flaws were visible to anyone -- neither metallurgist nor sailor -- after the vessel left the Hyundai Dockyard in 1984. Obviously the hole in the starboard topside/deck joint was not visible. The absence of "full-penetration" welds in the deck doublers was not visible because the shortfall was below the joints and against the deck, and as to this, HMD had played it down. Then, there was duplicative and unnecessary welding filler and quality-damaging slag included in the welding material which was neither visible nor could it be discovered absent metallurgical testing, thus obviously not available to those in charge of operating the vessel. Accordingly this flawed lengthening insert met its grievously distressing end without any reason to anticipate it on the part of the owners, the captain, the mates or seamen, in which while a major storm -- though not unusual -- the vessel took a number

⁴ I note that even the Hyundai people in an early letter dated February 11, 1999, a senior design manager J.S. Kim stated: "Our opinion is that it is reasonable to think that the crack in the ship was initially on the upper part on the basis of above information and our checking the damaged structure."

I further note that this opinion was later backed away from because the obvious consequence of its validity was that Hyundai was liable under a number of theories of law for faulty construction of the insert to the vessel.

of unexpected stresses of some very major rolling and climbing and falling in conflicting seas with a number of unusual waves.

The Hyundai defendants, relying mainly on computerized input from a "finite element analysis" assert the conclusion that the vessel failed first at the bottom. This is not only contrary to the captain's personal observations from the bridge, *see supra*⁵ but, I conclude, had not taken sea conditions into consideration (*see* Tr. 1556) and completely disregards the absence of wrinkles, etc. I reject the Hyundai defendants' suggestions that the master's route was negligently inappropriate; that alleged flaws in the forward hatch covers were the cause of the eventual sinking of the bow;⁶ or that the vessel's destruction was caused by its being overloaded.

⁵ The Hyundai defendants, based on the captain's testimony that the bow light was still lit when the vessel was going up the second wave, contend that it was the bottom that had come apart first, for they contend that the wires to light the bow light run under the deck, not along the bottom. This, however comes nowhere near overcoming all the balance of the captain's testimony and the well-documented and photographed evidence of the hull condition thoroughly supporting the conclusion that the parting was at the deck first. And I conclude it is not at all unlikely that even if the light went out after the first wave, the captain, who, in the nerve-wracking seconds as the vessel was coming apart, was still able to see the light fixture itself and with this vessel already broken and coming apart under his feet and before his eyes, could well have remembered the light as "on" even though as to this detail he was mistaken. Alternatively it is not at all unlikely that with a 900 foot long vessel there was enough slack in the wire in the sub-deck conduit to keep it intact though stretched--and the bow light lit--until the bow section broke loose and the stern was turned to starboard to avoid hitting it. There is even some question of whether indeed the bow light wire ran along the bottom or under the deck. There may be other explanations in that frantic minute or two--who knows what happened!

⁶ The split tearing open the bottom, it is entirely understandable that over five days enough water would get into the bow sections to sink it.

Under the circumstances, the Hyundai defendants are liable to the plaintiffs and third-party plaintiffs on principles of strict liability flowing from §402A & §400 of the Restatement, (Second) of Torts and its successor of §14 of the Restatement (Three) for the faulty manufacture and sale of the lengthening insert in 1984. At the outset, I conclude that the addition of the insert to the *Carla* was clearly a "sale" and not a repair. A repair generally is where something is broken and then is fixed. Here the contract was to manufacture a new elongation section of the vessel and place it in the vessel's middle. Nothing was broken or repaired and such ship elongation was within the normal and continuing course of the Hyundai business calling for the creation of a new section and its installation. Given this, it was built for sale by Hyundai and was placed in position and attached in the regular course of Hyundai business for a given contract price—a sale price. The failure to properly fabricate the installment to this section is within this doctrine. Hyundai Corporation and its Hyundai Nipo Dockyard had a duty to use reasonable care in designing and manufacturing the product to enable it to avoid foreseeable risk of injury. *Sprung v. MTR Ravensburg, Inc.*, 99 N.Y.2d 468, 758 N.Y.S.2d 271 (2003). The design and manufacturing defects cited above were such that in foreseeable normal use, even though a number of years later, the Hyundai defendants' workmanship would fail with the obvious risk of damage to the vessel and its cargo. *See Sears Roebuck and Co. v. American President Lines, Ltd.*, 345 F. Supp. 395 (N.D.Cal. 1971).

The Hyundai defendants suggest that the plaintiffs' warranty claims fail for lack of privity, but whatever else, that is not the law in admiralty cases. See *Todd Shipyards Corp. v. Turbine Service, Inc.*, 467 F.Supp. 1257 (E.D. La. 1978); *In re American Export Lines, Inc.*, 620 F. Supp. 490 (S.D.N.Y. 1985). All that the cargo interest must show and the Court here has so found:⁷

- (1) that the product was defectively designed or manufactured;
- (2) that the defect existed when the manufacturer delivered it to the purchaser or user;
- (3) that the defect is a proximate cause of the accident.

See *American Express Lines, Inc.*, 620 F.Supp. 490 (S.D.N.Y. 1985) at 517, and *Cigna Property and Casualty Insurance Co.*, 1995 WL 125, 386 (S.D.N.Y. 1995) to identical effect.

The Hyundai defendants are also liable in negligence on the established facts above, see *Sears Roebuck and Co. v. American President Lines, Ltd.*, 345 F. Supp. 395 (N.D.Cal. 1971) at 399.

In defense they assert that the cargo interest claims, to the extent that there have been insurance settlements, are barred by a New York principle called the Settlor Bar Rule which provides in part that: "[a] tortfeasor who has obtained his own release from liability shall not be entitled to contribution from any other person." NY Gen. Oblig. Law §15-108(c). This is however inapplicable here for these claims arise not in tort but

⁷ The real tragedy here is that the flaws in the design and manufacturer were not visible until the vessel broke apart because of their hidden existence.

in contract on the basis of bills of lading issued to the cargo interests. In addition, these claims have already been ruled on adversely during the course of the trial and are therefore no longer before me.

Next, notwithstanding the Hyundai defendants' claims, the North of England's (NOE) Indemnity Claims are proper. This argument is not only premature, for damage issues have not yet been tried, but the principle applicable here is articulated in *Atlantic Richfield Co. v. Interstate*, 784 F.2d 106, 113 (2d Cir. 1986) cert. denied 479, U.S. 817, 107 S.Ct. 75 (1986). The necessary showing being only that of "potential liability", NOE's indemnity action meets this requirement.

I decline to consider the Hyundai interests reraising the claim of lack of personal jurisdiction of the NOE complaint, for in the well-over-a-year since that complaint was filed in May 2002 and the briefing here, the Hyundai interests have filed and argued a summary judgment motion and participated in a thirteen day trial before the Court without raising the jurisdictional issue. I find this to be a waiver of this defense, particularly against the background of their waffling on the New York City telephone company—
listing.

Finally, the Hyundai Corporation endeavors to separate itself from tort liability on the ground that it had "no role to play in performing or controlling any of the work done under the conversion contract," asserting as to it the mere existence of a nominal contract status.

This argument fails because HC is a "manufacturer" and "seller" under products liability law regardless of whether the action is in strict liability or negligence making HC's assertion of exculpatory minimal "contractual status" irrelevant. Further, plaintiffs are proceeding against HMD and HC under a theory of products liability based on (a) strict liability and (b) negligence which is:

One engaged in the business of selling or otherwise distributing products who sells or distributes as its own a product manufactured by another is subject to the same liability as though the seller or distributor were the products manufacturer.

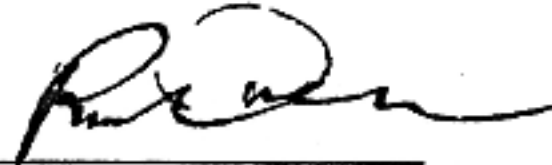
But, in addition, undisputedly established on this record, HC is the party named in the construction contract as the "contractor" and was the recipient of the agreed-upon price for the work. HC was the party obliged to pay liquidated damages if required, and was required to maintain builders' risk insurance. HC was the party designated in the letter of commitment and in the refund guarantee. Moreover, aside from the contract, HC listed itself as the "exporter of record" on the export declaration. HC held out the elongated vessel as a product which HC manufactured and sold. Accordingly, under the Restatement, HC is a manufacturer and seller for the purposes of plaintiff's and third party plaintiffs' claims.

Accordingly, all parties are directed to appear before me on July 26, 2004 at 3:30 p.m. in Courtroom 1106 to schedule the next steps to the hearing of damage issues against the Hyundai defendants.

The foregoing constitutes the Court's findings of fact and conclusions of law and is

So Ordered.

Dated: New York, NY
July 9, 2004



United States District Judge