IN THE SUPREME COURT OF NOVA SCOTIA

Citation: Secunda Marine Services Ltd. v. Liberty Mutual Insurance Company, 2005NSSC180

Date: 20050629

Docket: S.H. No. 170362

Registry: Halifax

Between:

Secunda Marine Services Limited

Plaintiff

v.

Liberty Mutual Insurance Company, carrying on business under the name Liberty International Canada, Royal & Sun Alliance Insurance Company of Canada and Reliance Insurance Company

Defendants

DECISION

Judge: The Honourable Justice Douglas L. MacLellan

Heard: May 30, 31 and June 1, 2005

Counsel: W. Wylie Spicer, Q.C., and Jane O'Neill, for the plaintiff

Rui M. Fernandes, Esq., Demetrios Yiokaris, for the

defendants

By the Court:

[1] The plaintiff, Secunda Marine Services Limited, claims against the defendant Liberty Mutual Insurance Company under the terms of an insurance policy issued to cover the plaintiff's vessel the Chebucto Sea.

Background

- [2] The parties have agreed that certain facts are not in dispute. These include the facts set out in the plaintiff's statement of claim in paragraphs 1-4. They are as follows:
 - 1. The Plaintiff is a body corporate with offices in Dartmouth, Nova Scotia. The Plaintiff is engaged in the business of shipowning and chartering and operates worldwide.
 - 2. The Defendants are bodies corporate carrying on, *inter alia*, the business of marine insurance. At all times relevant hereto, the Defendants were insurers on a policy of insurance being policy number MMJPT-85-99 (the "Policy") which insured, *inter alia*, the motor vessel CHEBUCTO SEA, (the "Vessel") which at all material times was owned by the Plaintiff.
 - 3. In May, 1998, the Plaintiff had chartered the Vessel to John E. Canning Ltd. (the "Charterer") on a bareboat charter in the "Barecon 89" form.

- 4. On May 28, 1999 during the currency of the bareboat charter and during a tow of the barge "Seabarge III" from Prince Edward Island to Newfoundland, the Vessel lost pitch control to the propeller. After carrying out an underwater inspection, it was discovered that the tail shaft of the Vessel had broken off at the flange.
- [3] The parties have also agreed that the cost of repairs to fix the tail shaft was Six Hundred Ninety-Nine Thousand, One Hundred Thirty-Five Dollars and Eighty Cents (\$699,135.80). The only issue on damages is whether the policy terms would allow that figure to be reduced somewhat. That issue will be addressed later in this decision.
- [4] The central issue in this case is whether the defendant can be excused from paying the claim because the policy contained a clause requiring the plaintiff, as owner, or any charterer of the vessel, to exercise due diligence in the inspection of the vessel.

Evidence

[5] Jens E. Trysgaard testified. He started working for the plaintiff in 1983 and was in charge of maintenance of the plaintiff's vessels. At that time the plaintiff owned three short supply vessels servicing the off-shore. By the mid-90's, the plaintiff operated 17 or 18 vessels.

- [6] Mr. Trysgaard's background was with the Canada Coast Guard as a Chief Engineer on Coast Guard ships. He had received the certificate for that back in 1969. He started his seafaring career back in 1955 and therefore has 50 years experience in the marine field. At one point in his career, he was supervisor in charge of the construction of a research vessel in Vancouver in B.C.
- [7] In 1994, he was asked by his employer to take a look at the vessel Chebucto Sea because the company was considering purchasing it. It had been operated by the Canadian Navy and was being sold by Crown assets. He went and inspected the vessel and felt that it was in good shape. He reported back to his boss and short time later the plaintiff purchased the vessel. It was planned that it would be used as a tugboat to tow barges.
- [8] In order to get approval to use the vessel it had to be registered according to a certain classification system. He said the Coast Guard did that classification and it required that the vessel be put in dry-dock and all the equipment on board manually inspected. That was done and the only problem encountered was with the propeller system which was remedied by the installation of a pump. The ship was then

classified for home trade. This meant that it could be operated in Canadian waters and within a certain distance of land in International Waters.

- [9] As part of the classification process, the propeller tail shaft had to be removed and inspected. Mr. Trysgaard explained that when this was done he noted that the propeller shaft had towards the end part, to which the propeller was attached, an area which was exposed to sea water. Otherwise, the rest of the shaft was covered by a brass fused coating to protect it from corrosion. The area of the shaft to which the propeller was attached was covered by an outer rope guard. This was to protect against ropes or other debris getting tangled in the turning shaft. This rope guard which is shown in the diagram in Exhibit 1-Tab 14 and Exhibit 3 has two holes which permit a person to look at the shaft without removing the rope guard. There is also an area of about four inches of the shaft fully exposed which is the area between the rope guard and the flange where the propeller itself is attached to the shaft. The shaft itself is about 18 inches in diameter and about 15 feet long.
- [10] Mr. Trysgaard said that he personally inspected the propeller shaft and that in 1995 there was no evidence that the shaft ever had any kind of protective coating over it in the area of the rope guard. He said that the shaft was taken out of the vessel and

Peter Johnson from the Coast Guard was responsible to do the inspection of the shaft and that he observed it while still on the ship. Mr. Trysgaard said that he was familiar with the test to be done to determine if the shaft had any cracks. That involved removing the rope guard and sanding off any corrosion built-up on that area of the shaft. He said that he initially observed only slight rusting on the exposed part of the shaft and that he had that removed by using smooth sandpaper. He said the shaft looked clean and smooth. He said there was nothing visible to cause a concern. Mr. Trysgaard said that he discussed with Mr. Johnson the test to be done on the shaft and that they agreed that a dye-penetrant test would be done at the Marine shop in Dartmouth. That test was to determine if there were any faults in the shaft not observed by the visual inspection.

- [11] He said the test result showed no problem with the shaft and it was re-installed into the vessel.
- [12] Mr. Trysgaard said such an inspection of the shaft would normally be required every five years and therefore it would be good until the year 2000.

- [13] He said after all of the inspections were done the vessel was classified by the Coast Guard, it went into service for the plaintiff in the summer of 1995.
- [14] The plaintiff company used the Chebucto Sea to tow a barge carrying pulp from Prince Edward Island to Newfoundland and Quebec.
- [15] Over the next number of years it was also rented out, sometimes with a company crew operating it and sometimes with no crew (Bareboat Charter).
- [16] In August, 1996, Mr. Trysgaard said that while under charter he got a report that the Chebucto Sea had sustained some damage because of a grounding. He travelled to Quebec to inspect the vessel and determined that it would have to be drydocked because of possible damage to the propeller. That was done and when it was taken out of the water a number of Coast Guard officials were involved in inspecting it for damage. There were also representatives of the Salvage Association present. That is the group responsible for insurance on ships. The ship was in dry-dock for eight or ten days and the propeller was removed to permit repairs. At that time Mr. Trysgaard said he looked at the shaft for damage and to do so he looked through the

holes in the rope guard. He said he used a flashlight to look at the shaft inside and could only see slight rusting on the shaft. That did not cause him any concern.

- [17] At that time the representative from the Salvage Association, Mr. Ron MacDonald, was present looking at the damage since that group was responsible for the costs of repair.
- [18] Repairs were done to the propeller and the vessel went back into service. In October, 1996, after the charter was completed the plaintiff arranged to have a diving firm inspect the underwater hull of the Chebucto Sea. That firm filed a report with the plaintiff [Exhibit 1, Tab 7] indicating some additional damage to the propeller.
- [19] During the summer of 1997, the vessel was chartered to the firm John E. Caning Ltd and used for transporting pulp. In 1998 it was again chartered by the Canning Company and in the winter of 1998 1999 it was tied up in dry-dock in Prince Edward Island where a major engine overhaul was done. Mr. Trysgaard said he inspected that work which was being done by the Canning Company.

- [20] In May 1999, while under charter to John E. Canning Limited, the Chebucto Sea lost its propeller while entering Stephenville Harbour in Newfoundland. It was towed to Pictou, Nova Scotia and put in dry-dock. The propeller shaft had broken off in the area of the rope guard. This action resulted from the dispute between the plaintiff and the defendant which carries the insurance policy on the vessel.
- [21] Mr. Trysgaard testified that after the action was started he was asked for the file in his office which was created when the Chebucto Sea was first purchased by the plaintiff and that he could not locate the file.
- [22] On cross-examination Mr. Trysgaard was asked about the possibility of having the propeller shaft coated by some form of epoxy coating where the shaft itself was exposed to sea water and not covered by the brass shaft lining. He said there was no such coating on the shaft when he first viewed it in 1995, and he did not attempt to apply such a coating. He felt there was no need to do so. He said it had apparently survived many years without such a coating. He said that would have been his decision if he felt it was necessary.

- [23] He said that the Coast Guard Regulations only required such a coating if the shaft had a non-continuous shaft liner. He said the shaft of the Chebucto Sea had a continuous liner therefore the exposed part did not have to be coated according to the Regulations. He was asked about a different type of test on the shaft which could have been done in 1995. That test is called the magnetic-particle test. He said that it did the same thing as the dye-penetrant test and that it probably is a better test to detect cracks in the shaft.
- [24] He was asked about his inspection of the shaft in 1996 when the vessel was in dry-dock in Quebec. He said that there were a number of people present inspecting the vessel for damage including Mr. MacDonald from the Salvage Association and a representative of Transport Canada. He said they all discussed possible repairs to the propeller and had no discussion about the shaft itself. Mr. Trysgaard was asked about a number of other incidents involving the Chebucto Sea and the possibility of damage to the shaft during these incidents. He said that on each occasion there was nothing to make him suspect that the shaft had been damaged except in August 1996 when he did look at the shaft and saw nothing that caused him concern.

- [25] He was asked if his company ever used the magnetic-particle test on propeller shafts and he testified that if the classification surveyor had asked for it, he would have arranged to have that test done.
- [26] Peter Johnson works for the Marine Safety Division of the Government of Canada. His job is to inspect ships for safety concerns and to certify ships if they meet the requirements.
- [27] He has been doing that since 1999 and has inspected over 2000 ships. He is a naval architect and he was present in 1995 when the Chebucto Sea was being classified for the plaintiff. His job was to inspect the ship and determine if it met all the criteria necessary to be placed in a certain class.
- [28] He said that he observed that the shaft of the Chebucto Sea had a bronze shaft liner which would be considered a continuous liner over the shaft up to the point where the rope guard is installed and the propeller is attached. That part is exposed to sea water and he said that he has seen 50 to 75 of this type of shafts and very seldom would he see any kind of coating on the shaft in these circumstances.

- [29] He said that the Transport Regulations would only require the type of inspection he did on the Chebucto Sea in 1995 every five years, therefore, the next inspection would be in the year 2000.
- [30] He explained how inspections are done and how a database file is maintained with Transport Canada on every ship. It is called Ships Inspection Report or SIR. This file can be accessed by government officials to see the status of the government inspections on a particular vessel.
- [31] He said that when he inspected the Chebucto Sea in 1995 the shaft had been pulled out of the hull and the rope guard had been removed. He said the shaft was in very good condition. It had obviously been cleaned and was shiny and showed no signs of imperfections or wear.
- [32] He requested that a dye-penetrant test be performed on the shaft. He said that was done, but he was not present when the shipyard did the test. He said certain marine shipyards are qualified to do such a test. He said he saw the results of the test and there was nothing detected that caused him a concern. Based on that, he certified the shaft for another five years.

- [33] On cross-examination Mr. Johnson testified that he felt it was not a good idea to attempt to apply a coating to the exposed portion of the shaft not protected by the bronze shaft liner because to make the coating adhere to the shaft you would have to rough up the shaft surface. He said that this might cause corrosion to start in that area if the coating applied failed. He said that he normally did not observe any kind of coating on shafts similar to this one.
- [34] John Attersley testified as an expert with expertise in all aspects of the inspection of vessels on behalf of owners, underwriters and the classification societies to ensure compliance with applicable regulatory regime.
- [35] He was called to respond to a report put in evidence by the defendants and prepared by Sower International Inc. [Exhibit 2, Tab 102].
- [36] In his report filed as Exhibit 1, Tab 13 Mr. Attersley took issue with the report written by Mr. Avijit Roy of Sower International which had suggested that the tail shaft of the Chebucto Sea should not have been exposed to sea water without some form of protective coating. He also disagreed that the owners had not used due

diligence by not having the shaft inspected in 1996 when the vessel was in dry-dock in Quebec.

- [37] Mr. Attersley refuted a number of the claims in the Sower report and concluded that since the plaintiff had complied with all the Department of Transports regulations requiring inspection of the vessel that the owner had exercised due diligence.
- [38] Dr. Cliff Thornley was called as an expert by the defendants. He was qualified as an expert metallurgist with expertise in analyzing metal failures and their causes.
- [39] His report [Exhibit 2, Tab 53] was a result of his examination of the broken tail shaft of the Chebucto Sea. He came to certain conclusions which are as follows:
 - 1. The shaft failed by brittle fracture.
 - 2. The brittle fracture started at pre-existing cracking.
 - 3. The pre-existing cracks were corrosion fatigue cracks.
 - 4. The shaft cracked by corrosion fatigue cracking because a small part of the shaft was free to corrode.

- 5. That part of the tail shaft that failed was free to corrode and crack because of two factors:
- (i) The shaft liner stopped short of the after end of the tail shaft, exposing some base shaft steel.
- (ii) The rope guard surrounding the exposed after end of the tail shaft shielded that bare steel shaft surface from the zinc anodes. No other corrosion protection was available to the bare length of shafting.
- [40] He also commented on whether it was possible to date the cracks he found in the shaft. He said:

In a telephone discussion with Mr. Doug Hamilton, of the Salvage Association, on Monday, 13 July, the question of the age of the cracks was considered. There is no reliable method, that I know of, for dating these cracks.

- [41] Doug Hamilton testified. He was qualified as an expert marine surveyor and marine engineer with expertise in all aspects of the inspection of vessels, and investigations as to the cause and extent of damage to vessels.
- [42] His report [Exhibit 2, Tab 69] indicated that his head office in London England concluded as follows:

The design of the tailshaft arrangement is such that, in our opinion, the tailshaft had a finite life and would have failed at some time due to corrosion fatigue. However, we believe it would not have been possible for Owners / Managers to predict the life expectancy due to the varying operating conditions. Owners / Managers should have been aware of this and taken all necessary precautions to thoroughly examine the tailshaft at every opportunity and have it replaced or refurbished as required.

In our opinion the corrosion fatigue fractures are to be expected as normal wear and tear for a shafting system of this design.

- [43] Avijit Roy was called to testify as a marine surveyor and marine engineer with expertise in all aspects of the inspection of vessels and specifically machinery and propeller systems, classification societies/regulatory schemes and industry standards regarding maintenance and inspection of vessels.
- [44] His report [Exhibit 2, Tab 102] suggested that the plaintiff did not exercise due diligence in the maintenance of the Chebucto Sea. He felt that the magnetic-particle test should have been used in 1995 instead of the dye-penetrant test. He also felt that in 1996 when the vessel was out of the water that the propeller shaft should have been removed for inspection instead of just a visual check by Mr. Trysgaard. He also felt that the tail shaft should have had a coating on the exposed portion not covered by the shaft liner.

[45] On cross-examination Mr. Roy admitted that his report contained a number of factual errors. In the report at page 9 he purported to quote 1(a) of the Regulations of Transport Canada in regard to carbon steel shafts. He indicated:

Quote:-Item 1(a) - Carbon steel shafts not covered by liners to be protected from water by welding joint or suitable bonded coating. Unquote.

- [46] He was referred by defence counsel to the actual regulations [Exhibit 6] which provides as follows:
 - 1. Screw shafts shall be made of
 - (a) carbon steel protected from exposure to water in the stern bearing by a corrosion-resistant continuous liner, or non-continuous liners between each of which is a welded joint or a suitable bonded coating;
- [47] Mr. Roy agreed that the shaft of the Chebucto Sea had in fact a continuous liner but suggested that his interpretation of the regulation meant that the coating should be on shafts with either a non-continuous or a continuous liner.
- [48] I would conclude that while it might be appropriate to disagree over the actual interpretation of the regulations it was improper and clearly misleading for Mr. Roy

to state in his report that he was quoting a regulation and then not do so, but only quote words which seemed to support his position.

- [49] I believe Mr. Roy was attempting to deceive any reader of his report, making it appear that the regulations had words which supported his opinion.
- [50] Mr. Roy was asked about the fact that Mr. Peter Johnson from Transport Canada had testified that in his opinion no coating should be applied to the unprotected part of the shaft because it might actually cause cracking instead of protecting the shaft. Mr. Roy said that he disagreed with that opinion.
- [51] Mr. Roy was referred to page 13 of his report where he stated that in 1996 when the vessel was dry-docked there was no measurement done to determine if there was wear down on the stern tube bearing. He was referred to documentation which in fact showed that such a measurement was in fact done. He said he had overlooked that report in the materials provided to him.
- [52] Mr. Roy also stated in his report (page 15) that he disagreed with the decision of Transport Canada to credit the 1996 dry-dock inspection as a periodic general

on the fact that he understood that no one from Transport Canada was present during that dry-docking. The evidence before me from Mr. Trysgaard was that there was a representative of Transport Canada Ship Safety Division present during the inspection and it was on that basis that the owners were later given credit for that inspection instead of having the vessel inspected again in 1998.

- [53] Mr. Roy was questioned about why his report (page 23) indicated that he assumed that the shaft had a hair-line crack in 1995 despite the fact that the dye-penetrant test had not detected such a crack. It was suggested to him that there was no evidence to indicate that he should assume that particularly in light of the fact that Mr. Thornley's report indicated that the crack could have been there for months or a year.
- [54] Mr. Roy agreed that his report only referred to the years portion of that report and did not acknowledge that Mr. Thornley had indicated that the cracks could have developed only months before the tail shaft broke.

- [55] Based on the cross-examination of Mr. Roy, I conclude that his credibility has been seriously challenged and I reject totally his opinion about the cause of the breaking of the shaft in the Chebucto Sea. His explanation about the defects in his report does not satisfy me that they were simply minor matters. I think his report lacks balance and was designed to support the position of the party asking him and paying him for the report.
- [56] Mr. Roy attempted to deceive the reader by misquoting regulations which were in fact central to his opinion. I reject his interpretation of the regulations requiring coating on a continuous liner shaft.
- [57] I am not prepared to give any weight to Mr. Roy's report.
- [58] The issue in this case is whether the plaintiff exercised due diligence in ensuring that the tail shaft of the Chebucto Sea was maintained properly prior to the shaft breaking.
- [59] The plaintiff's counsel has quoted the definition of due diligence which I find I should apply in this case. I quote counsel's brief (paragraph 65):

"Due diligence" is a legal term used in a variety of contexts, including marine insurance. It essentially means "reasonable care in the circumstances". In determining "due diligence", the court will consider all the surrounding circumstances, including those known or reasonably to be expected. In setting a standard of due diligence, the court will consider the practice of others involved in the same industry, although a court may find that the industry practice is itself negligent. In Charles Goodfellow Lumber Sales v. Verrault, the Supreme Court of Canada considered the concept of "due diligence" in relation to the carriage of goods by water and adopted the following definition in Maxine Footwear v. Canadian Government Merchant Marine Ltd:

"Due diligence" seems to be equivalent to reasonable diligence, having regard to the circumstances known, or fairly to be expected, and to the nature of the voyage, and the cargo being carried. It will suffice to satisfy the condition if such diligence has been exercised down to the sailing from the loading port. But the fitness of the ship at that time must be considered with reference to the cargo, and to the intended course of the voyage; and the burden is upon the shipowner to establish that there has been diligence to make her fit

- [60] I conclude that the plaintiff did exercise due diligence. I conclude they complied with all statutory requirements and used reasonable care in the maintenance of their vessel. I reject the suggestion that in 1996 they were negligent when they did not have the tail shaft removed and re-tested.
- [61] There was no evidence that would lead them to require that. Mr. Trysgaard inspected the shaft and detected nothing which would make him suspect that the shaft or the rope guard should be removed for inspection. At that point they were only one

year after the testing done in 1995. The testing done on the broken shaft indicated that the shaft was heavily corroded. That clearly was not the case in 1996. I accept Mr. Trysgaard's evidence that he did not see that type of corrosion when he visually inspected the shaft in 1996. There would be no reason for him not to investigate if he had concerns about the tail shaft at that point. The claim was being covered by the insurers of the Charterer and would result in no additional costs to the plaintiff.

- [62] I conclude based on the evidence from Peter Johnson that the practice in the shipping industry was to not have a coating on portions of a shaft which had a continuous liner and it was reasonable for the plaintiff to follow that practice.
- [63] I find in favour of the plaintiff on the major claim.
- [64] The defendant has raised an issue about the wording of the policy and whether the actual costs of the shaft itself should be excluded from the claim. That cost is agreed upon by the parties to be \$48,700.00 US.
- [65] I reject this argument. The policy provides as follows:

LINER NEGLIGENCE CLAUSE

In consideration of additional premium of <u>included</u>, it is understood and agreed that the ADDITIONAL PERILS (INCHMAREE) Clause of the attached policy is deleted and in place thereof the following inserted:

"Subject to the conditions of this Policy, this insurance also covers:

- a. Breakdown of motor generators or other electrical machinery and electrical connections thereto; bursting of boilers; breakage of shafts; or any latent defect in the machinery or hull;
- b. Loss of or damage to the subject matter insured directly caused by:
- 1. Accidents on shipboard or elsewhere, other than breakdown of or accidents to nuclear installation or reactors on board the Insured Vessel;
- 2. Negligence, error or judgement or incompetence of any person;

excluding under both "a" and "b" above only the cost of repairing, replacing or renewing any part condemned solely as a result of a latent defect, wear and tear, gradual deterioration or fault or error in design or construction;

provided such loss or damage (either as described in said "a" or "b" or both) has not resulted from want of due diligence by the Assured(s), the Owner(s) or Manager(s) of the vessel, or any of them.

- [66] It is suggested that I should find that the cost of a tail shaft is excluded from the coverage.
- [67] I accept the interpretation advanced by plaintiff's counsel in the pre-trial brief at paragraph 35.

The Liner Negligence clause therefore covers the breakage of shafts, *simpliciter*, whatever the cause and also covers all damage to the vessel caused by accidents. Secunda submits that this is essentially an "all risks clause". The exclusion to coverage under the Liner Negligence Clause is only for want of due diligence by the insured and/or the owner of the vessel.

[68] He continues at paragraph 61.

The Liner Negligence clause in the present case covers the breakage of the shaft and also all accidental losses. Accidents are events that occur when the vessel is in voyage and the only thing that is not covered under this type of clause is a defect that is discovered during an inspection, and not while the vessel is in operation. For example, if, during an inspection, the tail shaft was condemned, the cost of replacing the tail shaft would not be covered. If, however, the tail shaft fails in operation, that loss is covered under the Liner Negligence clause.

[69] I find in favour of the plaintiff for the total amount of the claim being Six Hundred Ninety-Nine Thousand, One Hundred Thirty-Five Dollars and Eighty Cents (\$699,135.80) plus interest and costs.

[70] Counsel have indicated that they have agreed on interest being calculated at the rate of 3.40 percent and counsel will attempt to agree on costs. If there is no agreement the parties can file written submissions on costs.

J.