The "Teng He"
[2000] SGCA 53

Case Number : CA 7/2000

Decision Date : 25 September 2000

Tribunal/Court : Court of Appeal

Coram : Chao Hick Tin JA; L P Thean JA; Yong Pung How CJ

Counsel Name(s) : Steven Chong SC and Chua Choon King (Rajah & Tann) for the appellants; Jude P Benny, S Durai and Tan Hui Tsing (Joseph Tan Jude Benny Anne Choo) for the respondents

Parties : —

Tort – Negligence – Contributory negligence – Apportionment of responsibility – Ship severing submerged seismic cables towed by another vessel – Whether first or second vessel more responsible for damage caused

(delivering the grounds of decision of the court): The respondents, as owners of the cables, claimed damages from the owners of the Teng He which was at the relevant time in the same ownership as the Tai He, arising out of and in connection with the damage done by the Tai He when she severed submerged cables towed by the respondents` vessel Nordic Explorer in the Bo Hai Gulf, on 18 September 1998 at approximately 1605 hours.

In a judgment delivered on 31 March 2000, GP Selvam J held that the appellants were liable for 60% of the damage claimed, while the respondents were liable for the remaining 40%. [See [2000] 3 SLR 114.] The appellants appealed. Before us, they argued that their liability should be nil, or, at the very least, reduced to account for the respondents` negligence in failing to keep proper watch or give due warning of the submerged seismic cables. It was their case that the respondents` conduct or failure to act constituted the greater cause for the damage.

Background to the case

The undisputed facts are that at the material time, the respondents were carrying out seismic survey activities in the Bo Hai Gulf. Their survey vessel, the Nordic Explorer measured 81.8 metres. It proceeded at a speed of 4 to 4.5 knots and towed seven underwater seismic cables of up to 4,235 metres in length each. Numerous sensors, referred to as `birds`, were positioned at intervals along the cables to pick up seismic responses to an energy source emitted by the Nordic Explorer. Attached to the end of each cable was an orange coloured tail buoy floating 1.6 metres above water. Each tail buoy was fitted with a radar reflector and a Global Positioning System beacon. The undisputed evidence was that the Nordic Explorer could dive its seismic cables to a depth of nine metres in 30 seconds, and about 17 metres in three minutes. It was also equipped with six chase boats to protect and chase away any on-coming vessel in the vicinity of the Nordic Explorer and its seismic cables.

At the material time, however, its main chase boat and the only one with ARPA (an automatic route-plotting radar facility) was re-fuelling and not in the immediate area. The Nordic Explorer made its way on the course of 132 degrees at latitude 38 degrees 34.15 minutes North and longitude 120 degrees 21.61 minutes East.

Meanwhile, the appellants` vessel Tai He proceeded along a course of about 100 degrees from Xingang to Dalian at about 14 to 15 knots. Although the crew of the Tai He varied from this route to steer clear of the tail buoys and their positions on radar, such a variation placed her on a collision

course with the seismic cables towed by the Nordic Explorer. At 1538, the Nordic Explorer dived their cables to avoid collision with another vessel in the vicinity (referred to in the proceedings as `the Korean vessel`). It had sent chase boats, fired flares and sent securite messages to warn the Korean vessel of its underwater towage, but without success. Hence the decision to dive the cables at 1538. They resumed operating depth at 1556. Minutes later, at 1606 hours, the Tai He steamed across and severed all seven seismic cables towed by the Nordic Explorer.

Those on board the Tai He were unaware of this damaging contact. It was seven days later, while the Tai He was docked in Kobe, Japan, that the respondents` representative went on board the Tai He to conduct their investigations. Consequently, the respondents brought this action against the appellants for the damage caused to the seismic cables. They alleged that those on board the Tai He had failed to respond to the many warning signals sent out by the Nordic Explorer. These included the firing of flares, securite messages and the chase boats deployed to ward off vessels in the area. The respondents asserted that those on board the Nordic Explorer were preoccupied with a `ghost vessel`. Their case was also that the damage would not have occurred had the Tai He kept to its original course of 94 degrees. They had observed that the Tai He had kept a course of 94 degrees between 1553 and 1602 hours and therefore did not consider the Tai He a threat. However, at 1602 hours, the Tai He abruptly turned some ten degrees to port, putting it on a collision course with the submerged cables.

Indeed, the Tai He had altered her course to avoid the tail buoys that appeared on the radar as a cluster of targets. It was the appellants` case that at around 1554 hours, the Chief Officer ordered the helm put 15 degrees to starboard. At about 1602 hours, the Chief Officer observed on the ARPA that the Tai He had passed a small target on her port side at a distance of about one to 1.5 miles, such distance narrowing at 1605 hours to less than one mile from the cluster of targets. Shortly after passing these targets, the Chief Officer reverted the course of the Tai He to the original 94 degrees.

Decision below

The learned judge made the following findings of fact. Firstly, despite the repeated firing of green flares to warn the Tai He and the pursuit of chase boat No 201 using red flares and a loudspeaker to warn the Tai He of the seismic cables ahead, the crew on board the Tai He neglected and/or failed to respond. By ignoring these repeated warnings, the crew was negligent in their navigation and/or management of the Tai He.

Next, the learned judge dealt at length with the inconsistencies between the appellants` pleaded defence and the evidence adduced at trial. He viewed this as discrediting the Chief Officer of the Tai He. He took this witness to task for failing to accurately chart the positions of the tail buoys in relation to the Tai He when made to do so in exh P4. The learned judge relied on exh P3, a chart drawn up by experts at his direction, to demonstrate the witness`s unreliability. The learned judge found that the Chief Officer was not aware of the presence of any tail buoys or fishing vessels in the vicinity.

The learned judge affirmed the respondents` evidence that there was a Korean vessel which approached the Nordic Explorer`s community of vessels from her port side. That vessel first altered course to starboard and then to port and passed astern of the seven tail buoys. In this instance, he found that the respondents had dived their seismic cables to a depth of 17 metres as a precautionary measure.

After restating several fundamental rules of safe navigation, the learned judge found that the

appellants` servants were `incompetent and indiligent`. They had proceeded at a reckless speed, blind to the presence of the cables, buoys and chase boats. He found no basis for the appellants to assume that the moving buoys were not under tow. In such circumstances, they should not have cut across in front of the moving buoys. They were indifferent to the respondents` securite broadcasts by VHF on Channel 16. They were blind to the flares fired by the respondents` vessel. They would have no such difficulty if they had maintained an efficient radar and visual outlook. On a balance of probabilities, he found the only rational explanation for the Chief Officer`s navigation was not to avoid the `clustered fishing vessels` but to respond to the Korean vessel`s movements. Reading all these findings together, he found that if the Tai He had reduced its speed and maintained a better radar, visual and auditory watch, the fact that the buoys were being towed would have been appreciated and the collision would have been averted.

As for the respondents, the learned judge found that they had made the requisite broadcasts and fired warning flares. At the crucial moment, they had just managed to divert the Korean vessel. The earliest time they could have realised that the Tai He was a threat was shortly after 1555 when the Tai He altered course to starboard. He accepted that at that point in time, those on board the Nordic Explorer were distracted by a `ghost` on the starboard bow on their radar. It was in this `moment of agony` that the Tai He approached them at a breakneck speed of 17.5 knots in restricted visibility. In this state of confusion, the Tai He escaped from the scene without the knowledge of the Nordic Explorer crew. In these circumstances, the learned judge accepted that those on board the Nordic Explorer should have developed a knee jerk reaction of diving the cables. They had done so moments earlier to avoid the Korean vessel. The learned judge ruled that their failure to do so contributed to 40% of the damage with the appellants liable for the remaining 60%.

Case on appeal

The appellants premised their case on causation. They contended that the acts or omissions of the respondents had a direct causative effect on the Tai He`s contact with the cables and that, but for these acts and omissions, the contact would not have occurred. The main issue was one of knowledge as this was key to determining how the damage could have been avoided. On the present facts, there was nothing to indicate to the Tai He that there were submerged seismic cables in the vicinity. Those on board the Tai He had fulfilled their duty of care to navigate in relation to apparent objects.

Instead, given the respondents` own knowledge of their activities and capabilities, it was reasonable to expect the respondents to discharge a duty of care of alerting other vessels to the presence of their submerged cables. They argued that the respondents should bear the greater liability for the damage because of their critical failure to safeguard the unusual nature of their vessel`s activity.

Firstly, the respondents neglected to send out adequate navigational warnings, whether by Navtext or by publication in the Notices to Mariners for seismic survey activities in China. Such measures had been taken with regard to the exploration activities of another survey vessel, the `Jinxing No. 2`, on 15 September 2000. They gave evidence that the respondents themselves had provided detailed notices with a previous survey operation involving another vessel, the Master Odin. Their failure to do so in the case of the Nordic Explorer was highly negligent given the lengthy three month survey period carried out over a large heavily trafficked zone with highly sensitive submerged equipment.

The Tai He was not equipped to receive the Morse Code warnings sent out by the Nordic Explorer. Although the latter party had later relied on manual distribution of notices to the fishing community, this was only after the Tai He had left port. Such failure placed a heavier duty on the respondents to

take extra careful measures while carrying out their operations. Therefore they could not avail themselves of the excuse that those on board the Tai He should have been aware of seismic activities in the Bo Hai Gulf at the material time since they were not given any notice. The appellants also brought the court`s attention to the respondents` admission that they had intended to publish these warnings but that their agents had failed to do so. Furthermore, the respondents had failed to rectify this throughout the period the Nordic Explorer was at sea.

The respondents` other means of issuing navigational warnings was via VHF. Appellants` counsel argued that clarity of transmission was like that between walkie-talkies, with Channel 16 being the sole channel used by all ships in the vicinity. It was submitted that, according to the respondents` Incident Report, one of their own chase boats had encountered difficulty using VHF in communicating with the Nordic Explorer. In the circumstances, the respondents could not reasonably expect their warnings via VHF to suffice. Whereas the Tai He was travelling in accordance with the Chinese Ministry of Transport`s Traffic Separation Scheme, by contrast the Nordic Explorer had not taken sufficient preventive measures to make their four-kilometre presence publicly known. It was contended that the learned judge had failed to consider the lack of public notification even though it was reasonably foreseeable that, along with the Tai He, other vessels were entitled to be in the area.

Next, the appellants argued that the Nordic Explorer crew failed to keep an adequate lookout. At the material time, the lead chase boat was absent. The three lead co-ordinators were transferred to other chase boats and not to the main vessel. This led to poor co-ordination of chase activities and culminated in the resulting failure to warn the Tai He. In fact, the six chase boats had been directed to divert the Korean and `ghost` vessels since they were in front. Counsel for the appellants attributed this failure to keep a proper lookout to at least one other handicap experienced by the Nordic Explorer. Its helipad created a `dead zone` 20 degrees to starboard and 20 degrees to port. The Tai He`s approach fell completely within this dead zone. Hence those on board the Nordic Explorer were unaware of the oncoming Tai He until after cables were severed. The respondents` own Incident Report had addressed this problem and recommended that the dead zone be rectified. The learned judge did not address this `dead zone` problem and the consequent failure of the Nordic Explorer crew to spot the 236 metre long Tai He. The Nordic Explorer chase boats may have been active in the area but they were never specifically deployed to counter the Tai He. This much was admitted by the respondents in their submissions on appeal. Their attention was on the `ghost vessel`. The appellants submitted that the respondents` ghost vessel could now properly be identified as the indirect radar echo of the Tai He.

The appellants argued that, in any case, the simplest and most effective response, whether to a real or surreal vessel, would have been to dive the cables. It was undisputed that the cables could be dived to a depth of nine metres in 30 seconds, and a further eight metres in three minutes. Counsel for the appellants submitted that this would have been far more effective than the respondents` postulation that the Tai He could have prevented the damage by turning hard to starboard at 1604 hours. It was submitted that such response could not have been taken in time. The cables were severed 400 metres from the stem and coupled with the fact that the Tai He had a stopping distance of 2.4 nautical miles this showed that, apart from diving the cables, it was a matter of time that the Tai He would cut across the path of the submerged cables.

The respondents` case centred on the unreasonable speed of the Tai He in conditions of such poor visibility. The Tai He was proceeding at top speed of 17.5 knots where visibility was one nautical mile. Given that its stopping distance was 2.4 nautical miles, this speed was reckless. It affected the crew`s judgment and hampered its ability to react in time. The respondents contended that, in their haste, the Tai He crew failed to observe the tow lights on the Nordic Explorer and to accurately assess the powerful cyclops radar reflectors as belonging to tail buoys with underwater towage. The

respondents dismissed their failure to give reasonable notice of their seismic exploration activities as `not reasonably practicable` in all the circumstances.

Decision on appeal

This was an appeal against findings of fact that carried much weight in the apportionment of liability. It is a settled principle of law that the appellate court is entitled to reverse decisions where, upon a careful study of all the evidence, a different conclusion is arrived at, on the facts. We were of the view that the present case merited a reversal on the apportionment of liability for the following reasons.

A preliminary observation may be made with regard to the need for official notification of a vessel`s seismic activities. We accept that a party has a duty of giving notice by whatever relevant form reasonable and practicable as is the common trade or practice of the area. In the present case, our view was that the failure to do so, although contributory, was not directly causative of the damage.

It was undisputed in the court below that not only were frequencies erratically jammed, but its use was ineffective in countering the approach of other vessels. Just moments before the incident, the Nordic Explorer had dived its cables to at least 15 metres to avoid the oncoming Korean vessel. As noted by the learned judge himself, this should have taught those on board the Nordic Explorer to develop a knee jerk reaction to dive the cables. We found that this was a critical failure on the part of those on board the Nordic Explorer. This failure was the result of several negligent acts or omissions which we now turn to discuss.

We accepted the appellants` case that the contact would have been prevented, had the chase boats been deployed in time and adequately equipped to warn the Tai He of the submerged cables. Although the learned judge criticised the Tai He for not visually sighting the 3 metre-long tail buoys, he did not adequately address the failure of the Nordic Explorer to deal with the approaching Tai He. Instead, he took those on board the Tai He to task for failing to notice the chase boats, flares and warning messages. We found this to be unduly harsh since the respondents had admitted that no flares or chase boats were specifically deployed to warn the Tai He of the submerged cables in the immediate vicinity. There was never any evidence that the Nordic Explorer crew were themselves alert to the presence of the Tai He. The testimony of the translator on board the Nordic Explorer testified that those on board the Nordic Explorer were unaware of the Tai He until after the contact had occurred. We were not impressed with the respondents` initial allegations that the Tai He had ignored warnings sent out by the Nordic Explorer to them. The respondents` excuse was that the master of one of their chase boats involved in chasing the Tai He was `mysteriously taken ill` at the time of the trial and they were consequently unable to adduce his evidence in court. They maintained that their final case was complementary to these initial allegations. This was a weak argument. In fact, at paragraph 129 of their case, the respondents asserted that `while the flares were fired without knowledge of the Tai He`s presence per se, the continual firing of flares ought to have put the Tai He on notice that there was an immediate danger ahead.` They also admitted that the sound signal was not specifically directed at the Tai He. This removed much of the basis for the learned judge`s finding that the Tai He crew was negligent, since his grounds extensively discussed their failure to respond to the VHF warnings addressed to them and the green flares fired at the Tai He by the Nordic Explorer.

None of the warnings were specifically addressed to the Tai He. Instead, as the respondents alleged, the appellants were negligent purely on the basis of failing to keep proper watch and due speed in conditions of poor visibility. Such an allegation was not sufficient to warrant a 60% blame in the

circumstances of this case. The court below accepted the visibility conditions to be poor at the material time. It cannot then be reasonable to expect the Tai He to sight flares that burn for approximately 40 seconds in such poor visibility. There was also no evidence to suggest that these flares were fired after the Korean vessel had safely navigated past the seismic vessel and its cables. Instead the overwhelming evidence was that these flares were fired in that heightened state of avoidance activity between 1539 until the cables were raised again at 1555.

Not only did the learned judge fail to address the inadequate lookout of the Nordic Explorer, he accepted that a `ghost` vessel distracted those navigating the Nordic Explorer at 1602 hours. The respondents built much of their case on the `consternation on the bridge of the Nordic Explorer at this moment`, claiming that those on board were restricted in their ability to manoeuvre and take avoidance action. With respect, we were unable to agree with the learned judge`s generous acceptance of evidence of this nature. Instead, we found greater weight should have been placed on other findings of negligence. For example, the respondents` First Officer admitted that he had spotted a radar target at 1549. This radar target proved to be the Tai He. Clearly, but for his failure to respond promptly (in this case, to dive the cables), the crossing of the Tai He would have been without incident.

In our view, all these inadequacies amplified the glaring failure of those on board the Nordic Explorer to dive the cables as they had done so just nine minutes prior to the incident. The respondents` failure to save the situation despite their instant ability to do so was critical. We were referred to the Nordic Explorer log that recorded the diving of seismic cables between 8 September 2000 until 27 September 2000 (the Nordic Explorer installed replacements on 27 September 2000). This log demonstrated no hesitation on the part of the respondents to employ their diving capabilities to avoid vessels crossing over the seismic cables. It was not difficult to find that their failure to do so was a direct cause for the damage. Taking this argument one step further, if the Nordic Explorer had dived its cables in time, only then would it be easier to conclude that they should not shoulder greater liability for the resulting damage.

Having dealt at length with the negligence of those on board the Nordic Explorer, we also found the appellants contributorily negligent. Much of this was sufficiently dealt with in the decision below. The appellants` negligence largely centred on their speed, inadequate lookout and poor management of equipment. As was the evidence before the court, it would not have made much difference had the Tai He been proceeding more slowly. The Tai He had navigated to avoid all navigational hazards that were apparent. These may have included the Korean vessel and the tail buoys, but it could not reasonably be expected to avoid hazards that were not brought to its attention such as the submerged seismic cables.

Conclusion

We found that the respondents` negligence, in particular, the failure to dive the cables even 30 seconds before the incident and hence, the ineffective responses that preceded it, carried a greater causative weight on the damage suffered. The appeal was allowed. The respondents were liable for 60% of the damage and the appellants for 40% of the damage.

Outcome:

Appeal allowed.