

Neutral Citation Number: [2023] EWHC 328 (Admlty)

Case No: AD-2021-000147

IN THE HIGH COURT OF JUSTICE **KING'S BENCH DIVISION ADMIRALTY COURT**

Royal Courts of Justice Strand, London, WC2A 2LL

Date: 17/02/2023

Before :

SIR NIGEL TEARE sitting as a Judge of the High Court with Captain Nigel Hope and Commodore William Walworth, **Elder Brethren of Trinity House, as Assessors**

Between :

FMG HONG KONG SHIPPING LIMITED, THE DEMISE CHARTERERS OF FMG SYDNEY Claimant - and -THE OWNERS OF THE MSC APOLLO

Defendant

Nigel Jacobs KC (instructed by Hill Dickinson) for the Claimant Vasanti Selvaratnam KC (instructed by Stann Law) for the Defendant

Hearing dates: 29 and 30 November and 01 December 2022

Approved Judgment

I direct that no official shorthand note shall be taken of this Judgment and that copies of this version as handed down may be treated as authentic.

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SIR NIGEL TEARE SITTING AS A JUDGE OF THE HIGH COURT

This judgment was handed down by the judge remotely by circulation to the parties' representatives by email and release to The National Archives. The date and time for handdown is deemed to be Friday 17 February 2023 at 10:00am.

Sir Nigel Teare :

- 1. At about 2232:15 (local time) on 29 August 2020 "FMG SYDNEY" ("SYDNEY") collided with "MSC APOLLO" ("APOLLO") in the approaches to Tianjin, China, in a position about 38° 50.3N, 118° 16.4E. Tianjin is one of the leading ports in Northern China and is the nearest port to Beijing some 80 miles away. The collision occurred in conditions of good visibility, light winds from East South East and slight seas. Both vessels were in ballast. SYDNEY was outbound and APOLLO was inbound.
- 2. Both vessels suffered damage and exchanged security in the combined amount of US\$13.5 million.
- 3. These proceedings were issued in November 2021. Electronic track data was exchanged in December 2021. Collision Statements of Case were exchanged in February 2022. Disclosure reports were exchanged in March 2022. The CMC took place in April 2022. At that CMC disclosure was ordered to be given, witness statements were ordered to be exchanged, and plots of the vessels' tracks, an accompanying schedule of navigational data, and a transcript of the vessels' audio records were ordered to be agreed. All of these steps were to be taken on dates between May and July 2022. In addition, "what if" plots, that is, alternative scenarios upon which the parties intended to rely at the trial showing what might have happened if either vessel had been navigated differently, were ordered to be exchanged by August 2022.
- 4. The trial took place on 29, 30 November and 1 December 2022. Unsurprisingly, given the agreed navigation of the vessels, the parties dispensed with the need for witnesses to give oral evidence. Their written statements were in evidence. The Assessors' advice was received on 7 January 2023 and counsel's written comments on that advice were completed on 7 February 2023.

The Vessels

- 5. SYDNEY is a very large ore carrier, having been built in China in 2017. She is 327m in length and 57m in beam, of 134,840 grt and 262,088.5 mt deadweight. She has five cargo holds which are served by nine hatches. Motive power is delivered by a MAN B&W 6G80ME-C9 diesel engine which drives a single, right hand, fixed pitch propeller. She had departed Tianjin at about 2000 on 29 August 2020 and was proceeding eastbound in ballast to Port Hedland, Western Australia. Her drafts were 11.62m (aft), 10.56m (m) and 9.68m (fwd).
- 6. At the material time her bridge team consisted of the master (Captain Sharma from India), the third officer as lookout and a duty able seaman as helmsman.
- 7. SYDNEY was operating two Furuno VR-7000 radar sets: X-Band located on the starboard side of the bridge console and S-Band on the port side. Navigation was conducted entirely on electronic charts with No.1 ECDIS on the port side next to the S-Band radar and No.2 ECDIS on the starboard side adjacent to the X-Band radar. The master was (mainly) on the starboard side of the console and the third officer was stationed on the port side.
- 8. APOLLO is a container ship, having been built in Japan in 2002. She is 299.90m in length and 40m in breadth, of 75,484 grt and 81,171 mt deadweight. The vessel is powered by

a Diesel United Sulzer main engine which drives a single right-handed fixed-pitch propeller. She was proceeding in ballast to an anchorage area to the south of the Channel entrance in order to disembark service engineers after completion of sea trials following a dry docking. Her drafts were 9.45m (aft) and 4.75m (fwd).

- 9. At the time of the collision the master (Captain Eradio from the Philippines) was on the bridge together with the chief officer, third officer, lookout and helmsman. The master has explained that he wanted the chief officer on the bridge because he was entering "heavily congested waters".
- 10. Her bridge is equipped with a wide range of modern navigation equipment, including two ARPA radar (X and S band), AIS, two segregated ECDIS systems, speed log, GPS, echo sounder and course recorder. She is also fitted with the standard rate of turn indicator, rudder angle indictor and propeller revolution indicator.

The tracks of the Vessels leading to collision

- 11. With the assistance of the VDRs on both vessels the parties were able to agree the tracks of the vessels leading to collision. I have appended to this judgment two plots showing those tracks. One is from C-18 and the other is from C-6.
- 12. The parties also agreed a schedule of navigational data upon which the plots were based. Included in this data are calculations of the vessels' Closest Point of Approach ("CPA"). In some cases these are a little different from the distances predicted by the vessels' radars. However, the technical experts who produced the agreed tracks and schedule are agreed that the CPA calculations produced by radar systems have a margin of error of the order of 0.3 nm. I shall note the agreed CPAs (and other distances) in this judgment but shall also note the radar distance because that was the distance available to the master navigating the vessel.
- 13. With the assistance of the agreed plots and schedule, the agreed audio transcript and the radar and ECDIS "screenshots" from SYDNEY together with radar screenshots from APOLLO I shall summarise the navigation of each vessel. Immense detail is available but a summary of the most relevant matters will suffice in circumstances where the detail is agreed as between the parties. However, whilst the navigation is agreed, the quality of the lookout on each vessel is in dispute and the conclusions to be drawn from the agreed navigation as to when the crossing rule applied are not agreed.

The navigation of SYDNEY

14. SYDNEY, having discharged her cargo, was leaving the port of Tianjin. She disembarked her pilot at 2112 and proceeded with her engines on slow ahead. Between 2214 and 2216 (C-18 to C-16) she was on a course of about 120 degrees. At about C-16 she advised Tianjin VTS that she was crossing the outbound reporting line (which was almost at the end of the buoyed channel from the port) and thereafter she commenced to alter course to port to make for the eastbound lane of the Caofeidian traffic separation scheme. The audio transcript records that the helmsman had been ordered to steer 105 degrees at about C-15. By 2218 (C-14) the engines of SYDNEY were increased to half ahead (40 rpm) and at 2219 (C-13) they were increased to full ahead manoeuvring (46 rpm). By this time SYDNEY's heading and course were 105° and 105°. The vessel's speed over the ground was 8.73 knots (but would increase since her engines had just been put to full ahead).

- 15. On the bridge of SYDNEY were her master, third officer and an able seaman who acted as helmsman. It was suggested just before the trial commenced that there ought also to have been a dedicated lookout. Because this suggestion was raised at a very late stage it was not appropriate to seek further information concerning the requirements set out in SYDNEY's Safety Management System. However, this did not prevent APOLLO from investigating the quality of the lookout on board SYDNEY and whether there had been a breach of Rule 5 of the Collision Regulations.
- 16. SYDNEY was one of several vessels leaving the port. In particular CHANG FA LONG was on her starboard quarter and HAI YANG SHI YOU 633 was on her port bow.
- 17. At 2220:30 (or about C-11.75) the helmsman was ordered to steer 106 degrees.
- 18. At 2220:45 (or C-11.5) APOLLO triggered the AIS alarm on SYDNEY's X band radar which had been set at 0.5 nm within 12 minutes. The agreed reconstruction shows that at this time APOLLO was bearing 17 degrees on the port bow of SYDNEY and was distant about 4.8 nautical miles. Both red and green sidelights of APOLLO could be seen from SYDNEY. The master endeavoured to see the lights of the vessel by binoculars but could not. He asked the third officer to monitor the vessel's movements. The third officer was able to see the red and green sidelights and masthead lights of APOLLO. The master and third officer concluded that APOLLO would pass astern of SYDNEY. It is agreed that the vessels were shaping to pass port to port with a closest point of approach (as calculated by the VDR experts) of 0.37 nm and that APOLLO would thereafter cross the stern of SYDNEY at a distance of over 2 miles.
- 19. The master stated in his witness statement that he was not concerned as the vessel was going to pass astern. Consistently with that evidence the audio transcript does not reveal any discussion on the bridge about this alarm.
- 20. At 2222.51 (or about C-9.5) the master asked for the speed of the vessel on his starboard quarter, CHANG FA LONG, and was told by the officer of the watch that it was 12.5 knots. At this time SYDNEY's speed was about 10.4 knots and just after C-9 the helmsman was ordered to steady on 106 degrees.
- 21. At about C-9 only the green light of APOLLO was visible from SYDNEY. There is no evidence that this was seen but the third officer stated in his witness statement that he gained the impression by observing the vessel by radar and by eye that APOLLO was altering course slowly to port. Since that observation was correct (as will be seen when I recount the navigation of APOLLO) there is no reason to doubt this evidence of the third officer. He decided to acquire her as a contact on the S band radar.
- 22. At 2225:30 (or C-6.75) the data of APOLLO became available on the S band radar. She was shaping to pass astern of SYDNEY on the latter's port side with a closest point of approach of about 0.04 nm. (or 0.01 nm on SYDNEY's radar). APOLLO was bearing about 20 degrees on the port bow of SYDNEY and was distant about 3 miles (or 2.89 nm on SYDNEY's radar.)
- 23. At about this time SYDNEY's heading, course and speed over the ground were about 106 degrees, 105 degrees and 10.8 knots respectively
- 24. It appears from the audio transcript that the master asked the officer of the watch what the target was ahead and was told it was APOLLO. At about C-6 he was told the closest

point of approach was 0.02 nm (which it was according to SYDNEY's radar). The agreed reconstruction shows that at this time APOLLO was now set to cross ahead of SYDNEY. Prior to this time APOLLO had been set to cross astern of SYDNEY.

- 25. At about C-5.5 the master said "he will not cross, will go from her stern" but then asked "is she crossing ?". Someone, probably the third officer, replied that he did not know. In his first witness statement the master said that he meant that the two vessels would pass port to port. In his supplementary witness statement he says that his comments were directed to whether APOLLO was crossing the bows of HAI YANG SHI YOU 633. Looking at the agreed plot his supplementary statement is likely to be correct. The question "is she crossing" suggests, however, that there was some doubt in the master's mind as to whether APOLLO would pass astern or cross ahead of HAI YANG SHI YOU 633. There was no change to course or engine speed.
- 26. At about C-4.5 the helmsman was ordered to steer 105 degrees.
- 27. At about C-4 those on the bridge of SYDNEY heard CHANG FA LONG instruct APOLLO by VHF "port to port, alter to starboard". CHANG FA LONG was on the starboard side of SYDNEY, also proceeding outbound.
- 28. At about the same time the helmsman was ordered to steer 107 degrees.
- 29. Seconds later, those on the bridge of SYDNEY heard APOLLO say to CHANG FA LONG "starboard to starboard", followed by CHANG FA LONG replying "no, no, no, port to port, port to port".
- 30. Thereafter the helmsman was ordered to steer 110 degrees.
- 31. At about C-3.75 the master commented to the third officer that APOLLO was "crossing completely". That must have reflected a conclusion that APOLLO was crossing ahead of HAI YANG SHI. Seconds later the third officer informed the master that APOLLO's CPA was 0.26 nm.
- 32. Very shortly after that APOLLO confirmed to CHANG FA LONG that the two vessels would pass port to port.
- 33. At about C-3.5 the helmsman was instructed to steer 115 degrees and at C-3 he was instructed to steer 120 degrees. The master has given two different accounts of his thinking at this time. In his witness statement the master stated that he realised that APOLLO was going to try to pass ahead of SYDNEY and then turn to starboard to effect a port to port passing with CHANG FA LONG. He then observed that CHANG FA LONG had applied starboard helm which gave SYDNEY "some sea room" to do the same. (The agreed reconstruction shows that CHANG FA LONG had indeed changed from a heading of 123 degrees at C-4 to a heading of 138 degrees at C-3.) In his supplementary statement the master said that, having seen APOLLO cross ahead of HAI YANG SHI and having heard CHANG FA LONG refuse APOLLO's request for a starboard to starboard passing, he was concerned as to what APOLLO was going to do and he increased his turn to starboard as much as he could "to give APOLLO as much sea room on my port side as I could for him to alter to starboard into." Having considered the plot of the vessels' tracks at this time I consider that his account in his supplementary statement is the more likely to be correct. Thus the master still expected APOLLO to turn to starboard.

- 34. By this time SYDNEY was heading 111 degrees. The change to her course made good caused by the starboard helm orders took a little time to develop. The agreed reconstruction records that at C-4 her course made good was 105 degrees and at C- 2.5 it was 107 degrees (though her heading was 115 degrees). Her speed was 11.3 knots.
- 35. Just after C-3 the third officer informed the master that it "looked as if APOLLO was turning to starboard". Again, this observation was correct because (as will become apparent from my account of APOLLO's navigation) the master of APOLLO had ordered hard starboard about half a minute earlier and the agreed reconstruction shows the heading of APOLLO altering from 241 degrees to 248 degrees. The master replied "Yes, he will come out", the meaning of which is unclear but probably reflected the observation that APOLLO was turning to starboard.
- 36. At about C-2.5 the master asked for the closest point of approach and was told 0.2 nm. Shortly before C-2 the third officer advised the master "bow crossing" at a distance of 0.2 nm in about 1.5 minutes.
- 37. Immediately afterwards APOLLO called SYDNEY by VHF. The master instructed the third officer to tell APOLLO to pass the stern of SYDNEY. The third officer did so at about C-2, adding that APOLLO should turn to starboard.
- 38. At about C-1.5 APOLLO replied "no my friend, can we pass starboard to starboard?"
- 39. 4 seconds later the master of SYDNEY swore and ordered hard starboard. In his witness statement the master explained that he thought a collision was imminent because although there was a bow crossing distance of 0.2 nm the distance from the antenna of SYDNEY to her bow was some 276 m.
- 40. Shortly before C-1 the master of APOLLO said: "We pass starboard to starboard ...you are passing me astern, my friend." At C-1 the third officer of SYDNEY, on the instruction of her master, said to APOLLO "Alter to port....alter to port". The master explained in his witness statement that an alteration to port by APOLLO might avoid a collision or minimise the angle of impact. That explanation is in accordance with the probabilities.
- 41. Very shortly before the collision the master asked whether APOLLO would pass clear and the third officer replied that she would.
- 42. But the vessels collided. SYDNEY's port bow contacted APOLLO's starboard side just forward of her accommodation at an angle of about 40 degrees. SYDNEY was heading 166 degrees and APOLLO was heading 207 degrees. In the last 4 minutes the heading of SYDNEY had changed some 60 degrees to starboard.

The navigation of APOLLO

43. The master has given written evidence that at about 2200 (C-32) APOLLO entered the westbound lane of the traffic separation scheme and proceeded on a course of 277 degrees. The agreed schedule of navigational data commences sometime later, at 2214 (C-18), but shows that at that time APOLLO was making good a course of 279 degrees. Her speed over the ground was a little more than 16 knots, which indicates that her engines were on full ahead. (The engines were ready for immediate manoeuvre as stated by her master and chief engineer though the rpm were between full ahead manoeuvring and full sea speed - the master's evidence was that the engine rpm was 55 whilst the

ship's particulars state that manoeuvring full ahead was 42 rpm, giving a speed of 12.4 knots in ballast.)

- 44. The master has given written evidence that he first observed SYDNEY at about 2200 (C-32) almost right ahead of APOLLO at a distance of 12.8 miles. There is no record of this observation. So precisely how the observation was made and how the master recollected it when interviewed is unclear. It was suggested that it came from AIS data made available to the master by the Owners of APOLLO. The master does not refer to his Owners providing him with such data though he does mention AIS data in his statement. However, what was or was not seen at C-32 was not causative of the collision.
- 45. The master has also stated that at 2217 (C-15) APOLLO had reached the end of the westbound lane where she was to turn to port. There is no reason to doubt that evidence. This was an alteration of course which had been planned in the vessel's passage plan (Waypoint 7). The audio transcript records at this time that an order of 266 degrees was given by the master to the helmsman. The agreed schedule of navigational data shows APOLLO commencing to turn to port at 2217 and to be making good a course of 267 degrees by about 2219 (C-13). Her speed over the ground was still a little more than 16 knots. Before this alteration of course SYDNEY was fine on the port bow of APOLLO at a distance of over 6 miles.
- 46. The X band radar screenshot of APOLLO for 2219 (C-13) shows that at that time APOLLO had acquired 4 contact vessels and had obtained their navigational data. One of those was SYDNEY (contact no.84). It is likely that the four vessels had been acquired as contacts a couple of minutes earlier, at about the time that the alteration to port was ordered. The radar screen shot shows SYDNEY now to be on the starboard bow of APOLLO at a distance of about 5.5 miles. APOLLO's heading was 266 degrees and SYDNEY was bearing 269 degrees. The agreed schedule also shows that at this time SYDNEY was very fine, 2 degrees, on the starboard bow of APOLLO.
- 47. The agreed schedule also shows that at this time the closest point of approach was 0.47 nm (or 0.58 nm by radar). The radar predicted that SYDNEY would cross the bows of APOLLO at a distance of 3.79 nm. The agreed schedule shows that (thereafter) APOLLO was predicted to pass astern of SYDNEY at a distance of 2.57 nm.
- 48. The master has said that, before altering course to 266 degrees, he checked the traffic situation to ensure that it was safe to do so. He described "the general traffic situation" as "clear". In fact, as the radar screenshot for C-13 shows, APOLLO had three vessels fine on her starboard bow at distances of about 5.5 miles. The master in his statement omits to mention that the vessels were on his starboard bow. He did however correctly note that SYDNEY had altered course to port towards the traffic separation scheme. He said that he could see the red light of both SYDNEY and HAI YANG SHI YOU 633.
- 49. By C-12 the CPA of SYDNEY was 0.41 nm (or 0.37 nm on APOLLO's radar), so under half a nautical mile.
- 50. At about 2222:30 (or about C-9.75) the master ordered the helmsman to steer 256 degrees. At this time SYDNEY was very fine on the starboard bow of APOLLO distant about 4 miles. The CPA was 0.47 nm (or 0.38 nm by radar), still under half a mile.
- 51. The master has stated that none of the vessels shaping for the traffic separation scheme posed a threat and that this further alteration of course to port was in order to proceed to

the anchorage south of the entrance to the port. The master says this was "planned" though it does not appear in the vessel's passage plan. It seems likely that at some stage the decision had been taken to proceed to the anchorage and not to follow the vessel's passage plan. It was suggested that the need to go to the anchorage arose because of the need to disembark two service engineers.

- 52. By about 2223 (or C-9) APOLLO was now making good a course of 259 degrees. As a result the bearing of SYDNEY from APOLLO on the latter's starboard bow had broadened to about 10 degrees. SYDNEY was still to cross the bows of APOLLO (but at a reduced distance of 1.42 nm) and the calculated CPA at C-9 remained 0.44 nm (or 0.37 nm by radar), still under half a mile. (It was this alteration of course to port which was observed by the third officer of SYDNEY and caused him to acquire APOLLO as a contact.)
- 53. The master has stated that, having checked ARPA, APOLLO and SYDNEY were to pass starboard to starboard, with SYDNEY passing safely astern of APOLLO. This was not indicated by his radar. According to his radar SYDNEY was to cross ahead of the bows of APOLLO, thus indicating a port to port passing. It is difficult to understand why the master made this error. The master's radar had shown since C-12 SYDNEY was to cross the bows of APOLLO.
- 54. At about C-8 the master ordered the helmsman to steer 250 degrees.
- 55. At about C-7 the master ordered the helmsman to steer 245 degrees.
- 56. At about C-6 APOLLO was making good a course of 248 degrees and SYDNEY was now bearing about 20 degrees on the starboard bow of APOLLO. According to the agreed schedule APOLLO was now predicted to cross ahead of SYDNEY at a distance of 0.23 nm. APOLLO's own radar showed that from C-5.45 APOLLO was now to cross ahead of SYDNEY with a CPA of 0.02 nm. The logbook of APOLLO, signed by the master, records that at C-6 SYDNEY showed a "CPA passing well clear astern of APOLLO". But a CPA of 0.02 nm does not suggest that the vessels are set to pass "well clear" of each other.
- 57. APOLLO's speed was 15.4 knots.
- 58. The master has said that he noticed that the bearing of SYDNEY was opening to starboard, "confirming to him that she was shaping to pass astern of APOLLO." However, the reason that the bearing of SYDNEY was opening to starboard and shaping to pass astern of APOLLO was that APOLLO had altered her course to port at C-8 and C-7 and was still proceeding at a little under 16 knots.
- 59. Just after C-6 the master ordered the helmsman to steer 240 degrees.
- 60. At this time HAI YANG SHI YOU 633 (which was on the starboard bow of APOLLO) had been attempting to contact APOLLO by VHF to enquire whether APOLLO wished to pass starboard to starboard. At about C-5.5 APOLLO requested HAI YANG SHI YOU 633 to pass starboard to starboard. That was agreed.
- 61. By about C-4 APOLLO was making good a course of about 242 degrees.

- 62. At about this time APOLLO contacted CHANG FA LONG by VHF and CHANG FA LONG instructed APOLLO to "alter to starboard." APOLLO replied saying "starboard to starboard", to which CHANG FA LONG responded saying "No.no. no, Port to Port". APOLLO then agreed to pass port to port.
- 63. Thus, at about C-3.5 the master ordered the helmsman to put the helm hard starboard. But just over 10 seconds later the master ordered the helm amidships. As a result the heading of APOLLO turned from 241 to 250 degrees by C-2. (This was the starboard alteration observed by the third officer of SYDNEY.)
- 64. At about this time the master of APOLLO addressed his mind to SYDNEY and instructed his third officer to tell SYDNEY to pass starboard to starboard. The third officer called SYDNEY and SYDNEY said "pass my stern, pass my stern".
- 65. The master of APOLLO instructed the helmsman to steer 240 degrees and her heading began to turn to port.
- 66. At about C-1.45 the master of APOLLO replied to SYDNEY in these terms: "no my friend, can we pass starboard to starboard ?"
- 67. SYDNEY replied "No.no. no" and APOLLO said "we pass starboard to starboard, you're passing astern now, you're passing me astern my friend."
- 68. At about C-1 the master of APOLLO instructed the helmsman to put the helm hard port. SYDNEY told APOLLO to alter to port and APOLLO replied that she was doing so.
- 69. The vessels collided. SYDNEY's port bow contacted APOLLO's starboard side just forward of her accommodation at an angle of about 40 degrees. SYDNEY was heading 166 degrees and APOLLO was heading 207 degrees. In the last 2 minutes the heading of APOLLO had changed over 40 degrees to port.

<u>Fault</u>

- 70. The parties' submissions were wide apart.
- 71. On behalf of SYDNEY Nigel Jacobs KC submitted that the vessels were crossing so as to involve risk of collision from about C-12, with APOLLO being the give-way vessel. He submitted that the failure of APOLLO to take early and substantial action to keep out of the way of SYDNEY was the cause of the collision. He submitted that it was difficult to suggest that there was any fault on the part of SYDNEY.
- 72. On behalf of APOLLO Vasanti Selvaratnam KC submitted that it was not until about C-5.5, when APOLLO was set to cross ahead of SYDNEY, that the crossing rule required action by APOLLO. She submitted that on the facts of this case the best way for APOLLO to keep out of the way of SYDNEY was to cross ahead of SYDNEY. What brought about the collision was SYDNEY's unsafe speed and her alterations of course to starboard from C-4. She ought to have kept her course or, if action could properly be taken pursuant to Rule 17(a)(ii) or Rule 17(b), she ought to have altered course to port. If there was any fault on the part of APOLLO it was that she failed to appreciate that SYDNEY might not have been fully aware of her intentions. If she had been so aware APOLLO would have made VHF contact earlier and agreed a safe starboard to starboard passing.

The faults of APOLLO

(a) Application of the crossing rule

73. Rule 15 of the Collision Regulations provides as follows:

"Where two power-driven vessels are crossing so as to involve risk of collision, the vessel which has the other on her own starboard side shall keep out of the way and shall, if the circumstances of the case admit, avoid crossing ahead of the other vessel."

74. Rule 16 provides as follows:

"Every vessel which is directed to keep out of the way of another vessel shall, so far as possible, take early and substantial action to keep well clear."

- 75. These Rules apply when vessels are in sight of one another; see Rule 11. There is no dispute that at the material time the vessels were in sight of one another.
- 76. At C-13 SYDNEY was very fine on the starboard bow of APOLLO at a distance of over 5 miles. There is no dispute that at that time the vessels were on crossing courses. SYDNEY was making good a course of 105 degrees and a speed of under 9 knots and APOLLO was making good a course of 267 degrees and a speed of over 16 knots. The agreed reconstruction shows that the predicted closest point of approach was 0.47 nm. and that APOLLO was thereafter to cross the stern of SYDNEY at a distance of over 2.5 miles.
- 77. The crossing rules only apply if vessels are crossing so as to involve a risk of collision. At C-13 the closest point of approach predicted by APOLLO's radar was 0.58 nm. By C-12 it was 0.36 nm. I asked the Assessors the following question:

In the approaches to Tianjin, to seaward of the buoyed channel, in circumstances where SYDNEY, a very large carrier in ballast of 327 m in length, was outbound and with her engines on manoeuvring full ahead, and where APOLLO, a container ship in ballast of 299 m in length was inbound and with her engines ready for immediate manoeuvre (though at rpm between full ahead and full ahead manoeuvring) what would be the minimum safe closest point of approach (a) if APOLLO were set to pass astern of SYDNEY after her closest point of approach and (b) if APOLLO were set to pass ahead of SYDNEY before her closest point of approach?

78. I received the following answer:

(a) if APOLLO were set to pass astern of SYDNEY after her closest point of approach:

Answer: We consider 0.5 nm passing port to port a safe CPA. APOLLO'S alteration of course to starboard or reduction of speed to achieve this CPA would have indicated to SYDNEY they were acting in accordance with Rule 15.

(b) if APOLLO were set to pass ahead of SYDNEY before her closest point of approach.

Answer: We consider the CPA should be a minimum of 1.0 nm. Two large ships crossing with a CPA of less than this and closing speed in excess of 25 knots can be considered a Rule 15 situation.

- 79. Counsel for APOLLO submitted that I should not accept this advice. It was observed that certain evidence of the master of SYDNEY assumed that there was no risk of collision with a CPA of 0.44nm and that the CPA shown in some of the "what-if" plots relied upon by the Owners of SYDNEY showed a lesser CPA than that advised by the Assessors. The Assessors' advice was described as a counsel of perfection in circumstances where counsel for SYDNEY had argued (at one stage) that lesser CPAs than those advised by the Assessors were appropriate. I have noted and considered these points but they do not persuade me that the Assessors' advice, based upon their understanding as experienced mariners of what would be a safe passing distance, should be rejected. On the contrary, given the combined closing speed of the vessels and their size, the Assessors' view as to the minimum safe CPA is of the order that I would expect. Counsel submitted that collision could have been avoided with a smaller CPA than that advised. That is no doubt possible but the question is not at what CPA can a collision be avoided but what is the minimum safe CPA having regard to the circumstances of the case. It was suggested that the Assessors' advice ignored the traffic density at the material time, the available aids to navigation and the benefit of a good lookout. It is unlikely that such matters were not present to the minds of the Assessors when considering their answers. The suggestion appears to be that given the traffic density, the available aids to navigation and the benefit of a good lookout a CPA of less than that advised by the Assessors would be safe. However, no attempt was made to show that the traffic density on the day necessitated a lesser CPA whilst the observations of counsel for SYDNEY based upon the "what-if" plots indicate that that was not the case. As I have said the Assessors' advice is consistent with what I would have expected and so I accept their advice. No cogent reason has been advanced for not accepting their expert and independent opinion. Indeed, I am not sure that any lesser minimum safe CPA was identified on behalf of APOLLO.
- 80. Since the closest point of approach at C-12 was 0.41 nm (or 0.36 nm on APOLLO's radar) it must follow that at C-12, when APOLLO's radar was predicting a closest point of approach of less than half a mile, the projected passing distance was less than the minimum safe passing distance and that the vessels were crossing so as to involve a risk of collision. That is confirmed by the circumstance that the compass bearing of SYDNEY from APOLLO had been 268-269 degrees since C-14.
- 81. It was suggested in the written submissions of counsel for APOLLO that the duty of APOLLO as give-way vessel was only "triggered" at C-5.5 when her radar showed that APOLLO would cross ahead of SYDNEY. I do not accept that submission. Prior to that APOLLO was shown as passing SYDNEY astern but with a closest approach of less than half a mile since C-12. Such a close point of approach, being less than the minimum safe CPA, gives rise to a risk of collision and thereby brings about the application of the crossing rule. The application of the crossing rule does not depend upon whether APOLLO is set to cross ahead of SYDNEY but upon whether the two vessels were crossing so as to involve risk of collision.
- 82. It follows that at C-12 APOLLO was obliged to take early and substantial action to keep out of the way of SYDNEY.

(b) APOLLO's breach of duty as the give-way vessel

83. I asked the Assessors the following further question:

At C-12 SYDNEY was very fine on the starboard bow of APOLLO at a distance of over 5 miles, making good a course of 104 degrees and a speed of 9.2 knots, and APOLLO was making good a course of 266 degrees and a speed of 16.4 knots. If the vessels were crossing so as at involve a risk of collision at C-12 what was the latest time by which APOLLO ought to have taken early and substantial action to keep well clear of SYDNEY pursuant to Rules 15 and 16 and what action should that have been ? (The plot of the vessels at C-12 can be found at D 18 and APOLLO's radar screen shots for C-12 can be found at B3/28-30.)

84. I received the following answer:

Answer: We have been asked for the latest time APOLLO ought to have taken action to keep clear of SYDNEY. This question should be seen in the navigational context. Using data from Table NRJ1 and Apollo X-band radar, at C-12 APOLLO had four ships either ahead, or on his starboard bow, with CPA of less than 0.56 nm, within four minutes of each other: 12.33 mins, 13.93 mins, 15.53 mins and 16.91 mins. We consider Rule 15 applied in each case. Each of the vessels were stand on vessels and APOLLO the give way vessel. We consider it unlikely all four would agree to a starboard to starboard pass. It only needed one of the four to insist on port to port passing, in accordance with Rule 15, to leave APOLLO little option but to execute his obligation as give way vessel, which was to alter course to starboard to keep clear, until it was safe to head towards their anchorage.

Moving to answer the question as given. We consider the **latest** time Apollo ought to have taken early and substantial action in accordance with Rules 15 and 16, was at C-7. At that time SYDNEY and APOLLO were 3 nm apart and the CPA 0.04, reduced from 1.76 nm at C-18. We note the reduction in CPA was the result of Apollo's alterations of course after C-12, to port, from 267 degrees to 245 degrees in three stages, at C-9.46, C- 8.15 and C- 7.05 which would appear to contravene Rule 8(b) Action to Avoid Collision.

Taking action at C-7, APOLLO would not only have complied with his Rule 15 obligation to SYDNEY, but also with HAI YANG SHIP YOU and the other ships. At or before C-7 APOLLO should have made a substantial alteration of course to starboard to put SYDNEY (and HAI YANG SHI YOU) on their port bow with a CPA of not less than 0.5 nm, as we recommend in the early answer. On completion of the substantial alteration to starboard, she should have maintained this heading until past and clear of SYDNEY. Alternatively, a substantial reduction in speed in accordance with Rule 8 (b), to allow SYDNEY to cross her bow, would have achieved the same result. The assessors consider the decision to attempt to cross the bow of multiple ships, or to turn to starboard after crossing the bow of HAI YANG SHI YOU, unseamanlike.

85. Counsel for APOLLO submitted that I should not accept this advice because it was flawed, being based upon the premise that the crossing rule applied at C-12. That was indeed the premise which underlay the question I put to the Assessors. The premise was not flawed. The Assessors' answer to Question 1 shows that at that time the vessels were

crossing so as to involve risk of collision; see paragraph 80 above. It is apparent from the first part of the Assessors' answer to Question 2 that they agree with the premise.

- 86. Counsel for APOLLO submitted that the premise was also flawed because it ignored the circumstance that at C-12 SYDNEY could see both side lights of APOLLO and that action was required of SYDNEY. This argument had been advanced at the hearing. I deal with it below (at paragraphs 97-106) where I reject it.
- 87. Counsel for APOLLO further submitted that the advice of the Assessors as to the action required of APOLLO should not be accepted because the action required of APOLLO was to maintain her course and speed (and so cross ahead of SYDNEY). This was another argument advanced at the hearing. I deal with it below (at paragraph 111) where I reject it.
- 88. The Assessors' advice as to the action required of APOLLO is what I would have expected and I have no hesitation in accepting it. No cogent reason has been advanced for not accepting it.
- 89. With regard to the Assessors' advice counsel for SYDNEY made the following submissions:

"First, it is clear from [1] that the Assessors consider that APOLLO should have taken "early and substantial" action under Rules 15 and 16 at C-12 when APOLLO was set to pass astern of the four vessels at 0.56 nms or less – i.e. at about C-12. Indeed, "NRJ1" shows that the CPAs of three of the vessels was 0.36 nms or less. This also reflects Answer 1(a). Rules 15 and 16 are predicated upon "early" action taken by the "give way" vessel "to keep well clear" rather than "the latest time" when such action could have been taken.

Second, as the Assessors point out under [1] and [2], the question was predicated upon the "latest time" when action ought to have been taken. This would not be the same as the time when action should have been taken under Rules 15 & 16. This is made clear in the second sentence of [3] where the Assessors refer to action taken "*at or before C-7*" to comply with Rules 15 & 16 and the reference to "*the early answer*". This relates to Answer 1(a) which is carried forward into [2].

Thus, insofar as this is in dispute, on proper analysis the Assessors consider that action should have been taken by APOLLO at C-12 to comply with Rules 15 & 16 but that action could and should have been taken at the latest by C-7 under Rules 15 & 16. The Assessors are not suggesting that it would have been seamanlike for APOLLO to wait until C-7 to take action under Rules 15 & 16."

90. The obligation upon the give-way vessel is to take early and substantial action to keep well clear of the other vessel. However, depending upon the circumstances there may be a spectrum or period of time during which action taken can be described as "early". The rule does not require immediate action as soon as the vessels are crossing so as to involve risk of collision. It requires "early" action. It was for that reason that the question asked of the Assessors was as to the latest time by which early and substantial action could have been taken by APOLLO. There was no objection to this question by counsel for SYDNEY. (A similar point arose in *Nautical Challenge Ltd. v Evergreen Marine [2022] EWHC 206* at paragraphs 74,76, 90, 96 and 101.) The Assessors' answer was C-7. Action

at that time would still have permitted a CPA in excess of 0.5 nm. which was, in the Assessors' opinion, the minimum safe CPA. Of course, action could have been taken earlier than C-7 but the latest time at which early and substantial action could have been taken was C-7. Thus, in so far as counsel submitted that the rule required action to be taken earlier than C-7 I do not think that I can accept that submission. To do so would be inconsistent with the Assessors' advice which I accept. The point is, however, academic because the required starboard helm action was not taken before C-7. On any view APOLLO failed to take the necessary early and substantial action to keep clear of SYDNEY.

- 91. Instead of taking early and substantial action to keep well clear of SYDNEY by C-7 at the latest, APOLLO altered course 10 degrees to port shortly after C-10, a further 5 degrees to port at C-8, a further 5 degrees to port at C-7 and a further 5 degrees to port at C-6. The effect of these alterations was that by C-6 APOLLO was set to cross the bows of SYDNEY. Prior to that she had been set to pass astern of SYDNEY, though the distance at which she would do so was falling from 2.5 miles at C-10 to 0.05 miles at C-7. Thus, whilst Rule 15 obliged APOLLO, if the circumstances admit, to avoid crossing ahead of SYDNEY, APOLLO was seeking to cross ahead of SYDNEY in breach of Rule 15. The circumstances between C-12 and C-6 were such that they did permit (or admit) APOLLO to avoid crossing ahead of SYDNEY.
- 92. Consistently with the master's intention to cross ahead of SYDNEY he instructed his third officer at C-5.5 to tell any ship that called by VHF to pass starboard to starboard. The third officer gave this instruction to HAI YANG SHI YOU 633 at C-5.5 and to CHANG FA LONG at C-4. HAI YANG SHI YOU 633, which was to port of SYDNEY, agreed to pass starboard to starboard but CHANG FA LONG, which was to starboard of SYDNEY, insisted upon passing port to port.
- There appear to have been two reasons why the master of APOLLO planned to cross 93. ahead of SYDNEY. The first reason was a wrong appreciation of how the vessels were approaching each other. The master has stated, with reference to the position at about C-10, that, having checked ARPA, APOLLO and SYDNEY were to pass starboard to starboard, with SYDNEY passing safely astern of APOLLO. This was not indicated by his radar. According to his radar SYDNEY was to cross ahead of the bows of APOLLO, thus indicating a port to port passing, with APOLLO crossing the stern of SYDNEY. The master also said that at C-6 he noticed that the bearing of SYDNEY was opening to starboard, "confirming to him that she was shaping to pass astern of APOLLO." However, the reason that the bearing of SYDNEY was opening to starboard and SYDNEY shaping to pass astern of APOLLO was that APOLLO had altered her course to port at C-8 and C-7. The second reason why the master planned to cross ahead of SYDNEY was that the master paid no attention to the requirements of Rules 15 and 16 of the Collision Regulations. He makes no mention of their requirements in his statement. It may be, as suggested by counsel for SYDNEY, that "the master hoped to proceed quickly across the bows of SYDNEY", assisted by several small alterations to port. This may also explain why the master said at about C-10 that the vessels were to pass starboard to starboard when his radar showed that SYDNEY was set to cross ahead of APOLLO so that the vessels would pass port to port. The master may have assumed that by reason of her speed and alterations to port APOLLO would in fact cross the bows of SYDNEY so that the vessels would pass starboard to starboard. Indeed counsel for APOLLO submitted that it was an "inference" that the master could reasonably draw from "their intended course and the course that is observed of the approaching vessels". If such an

inference was drawn it was not reasonably drawn. The master ignored both what his radar showed and his obligations as the master of a vessel required to keep out of the way of SYDNEY and decided to cross ahead of SYDNEY in breach of the crossing rule. On the balance of probabilities I consider that this is what happened.

(c) Inappropriate use of VHF

- 94. Instead of complying with the crossing rules so as to avoid a collision the master sought to use VHF as a means of seeking to agree a starboard to starboard passing in conflict with the crossing rules. He chose to do so with regard to each of HAI YANG SHI YOU 63, CHANG FA LONG and SYDNEY.
- 95. His conversation with HAI YANG SHI YOU 633 (which was initiated by HAI YANG SHI) was between C-6 and C-5.5. During this period APOLLO was set to cross ahead of HAI YANG SHI YOU 633 with a CPA of under 1 cable. (In the event HAI YANG SHI agreed to a starboard to starboard passing.) His conversation with CHANG FA LONG was between C-4.5 and C-3.5. During this period APOLLO was initially set to pass CHANG FA LONG astern at under a cable and then ahead of her at under a cable. (In the event APOLLO agreed to pass port to port). His conversation with SYDNEY was between C-2.25 and C-1.5. During this period APOLLO was set to cross ahead of SYDNEY at a distance of 2 cables and reducing. (In the event there was no agreement.)
- 96. In *MINERAL DAMPIER v HANJIN MADRAS* [2001] EWCA Civ 1278 Lord Phillips MR and Clarke LJ, two judges very experienced in collision litigation, observed that the use of VHF can in some circumstances be helpful if the vessel required to give way informs the other vessel of action being taken to comply with the Collision Regulations but that circumstances must be quite exceptional before good seamanship will justify agreeing on VHF a course of navigation which is in conflict with the Collision Regulations; see paragraphs 35-39. In the present case there were no such exceptional circumstances. The master of APOLLO ought to have directed his attention to complying with his duty as master of a vessel required to give way rather than seeking to persuade other vessels to let him navigate in a manner contrary to the Collision Regulations. As Marine Guidance Note MGN 324 issued by the Maritime and Coastguard Agency states, although VHF may be used on occasion as a collision avoidance aid, the provisions of the Collision Regulations "remain uppermost".

(d) A deemed "head-on" situation ?

- 97. Counsel for APOLLO submitted that the crossing rules did not apply at C-12. It was submitted that in circumstances where SYDNEY could see both sidelights of APOLLO from C-14 until C-9.5 there was deemed to be a head-on situation pursuant to Rule 14 (b) of the Collision Regulations and if there was a head-on situation then, as explained by Lord Briggs in *Nautical Challenge v Evergreen Marine* [2021] 1 WLR 1436 at paragraph 98, there could not be a crossing situation. It was accepted that by C-9, when SYDNEY could only see the green sidelight of APOLLO, the crossing rules could apply but not before.
- 98. Rule 14 provides as follows:

"(a) When two power-driven vessels are meeting on reciprocal or nearly reciprocal courses so as to involve risk of collision each shall alter her course to starboard so that each shall pass on the port side of the other.

(b) Such a situation shall be deemed to exist when a vessel sees the other ahead or nearly ahead and by night she would see the masthead lights of the other in a line or nearly in a line and/or both sidelights and by day the corresponding aspect of the other vessel."

- 99. A head-on situation is one where two vessels are meeting on reciprocal or nearly reciprocal courses so as to involve risk of collision; see Rule 14(a). It is clear that at C-12 the vessels were not on reciprocal or nearly reciprocal courses. SYDNEY's heading was 105 degrees and her course made good was 104 degrees and APOLLO's heading was 267 degrees and her course made good was 266 degrees. The reciprocal of 105 degrees is 285 degrees. The reciprocal of 104 degrees is 284 degrees. It was not and could not be suggested that with a difference of 17 degrees between their reciprocal headings or courses made good the vessels were on nearly reciprocal courses.
- 100. Since SYDNEY was able to see (and did see) both sidelights of APOLLO it was submitted that there was a deemed head-on situation which meant that there could not be a crossing situation.
- 101. It is implicit in counsel's submission that it is sufficient to bring about a head-on situation if only one of the two vessels can see both sidelights of the other. Reliance was placed on the wording of Rule 14(b) which referred to "a vessel". However, the essence of a head-on situation is that both vessels are meeting on reciprocal or nearly reciprocal courses. The limit of "reciprocal or nearly reciprocal" courses is set by Rule 14(b). It depends upon whether at night the masthead lights of the other vessel can be seen in line or nearly in line and/or both sidelights of the other vessel can be seen. In view of the express requirement for reciprocity or near reciprocity of courses in Rule 14(a) it is clear, in my judgment, that the test set out in Rule 14(b) must be satisfied by both vessels. Otherwise, Rule 14 would apply when the vessels were crossing on courses which were diverging to a substantial degree, for example, where one vessel is on a northerly heading and the other on an easterly heading. Yet that is the effect of counsel's submission. Rules 14(a) and 14(b) must be read together. Rule 14(b) does not say that a head-on situation is deemed to exist if "one of the two vessels" sees both side lights of the other vessel. I accept that Rule 14(b) also does not say that a head-on situation is deemed to exists if "each vessel" sees both side lights of the other vessel. But when one reads Rule 14(a) and (b) together, as they must be, that is the inevitable meaning of Rule 14.
- 102. Counsel made these submissions in writing after the hearing:
 - (1) There is nothing in the text of Rule 14 or the commentary in any of the text books which the parties have located which suggests that "a vessel" in Rule 14 (b) means both vessels.
 - (2) As a matter of language, and bearing in mind the COLREGS have to be read and understood by mariners all over the world, there is no basis for SYDNEY's submission that both vessels have to be able to see the sidelights of the other ship before the head-on rule is triggered. A vessel that sees both sidelights of another ship has to take action as required by the head-on rule and the crossing rule does not apply.
 - (3) Accordingly, if there was a risk of collision at C-12, SYDNEY, being able to see both sidelights of APOLLO at this time (and indeed from C-14: see D/105), ought to have altered course to starboard in accordance with Rule 14 and/or as a matter of good seamanship.

- (4) It will be for the Assessors to advise what action SYDNEY ought to have taken after both sidelights of APOLLO became visible and when, and whether that action would have resulted in APOLLO and SYDNEY not being crossing vessels (for example because SYDNEY altering course to starboard would have led to her being on the port side of APOLLO).
- 103. For the reasons which I have already given I do not accept submissions (1)-(3). The meaning of Rules 14(a) and (b) read together, and as they would be understood by mariners all over the world, is that the test provided by Rule 14(b) must be satisfied by both vessels. Submission (4) is also not accepted. Lord Briggs noted in *Nautical Challenge v Evergreen Marine* at paragraph 16 that the interpretation of the Collision Regulations is a matter of law for the judge to determine.
- 104. The particular point raised by counsel's submission could not have arisen in relation to the predecessor of Rule 14, namely Rule 18 in the Collision Regulations of 1960, which (like its predecessors, the 1910 and 1954 Regulations) referred to the end-on rule (as it was then called) applying when "each vessel is in such a position as to see both sidelights of the other". Rule 14 is expressed in different and simpler language than the old Rule 18 but I was not referred to any *travaux preparatoires* which suggested that the change in wording was intended to apply the head-on rule to cases where the vessels were crossing and not meeting on reciprocal or nearly reciprocal courses.
- 105. No support for counsel's submission is found in any of the familiar textbooks. In *A Guide to the Collision Avoidance Rules* 3rd.ed. by Cockroft and Lameijer the passage discussing Rule 14 refers to the previous Rule 18 and states that Rule 14 applies where "each vessel sees the masts or masthead lights, of the other nearly in line and nearly ahead"; see p109. By the time of the latest edition (7th.ed.) the mention of Rule 18 has been omitted as has been the passage quoted above. But there is no suggestion that Rule 14 applies when only one vessel can see both side lights of the other vessel. *Farwell's Rules of the Nautical Road* 9th.ed by Allen and Allen contains a lengthy discussion of Rule 14 (including a dispute with Captain Cockroft as to whether what must be reciprocal or nearly reciprocal is the heading (per Cockroft) or course (per Farwell) of the vessels) but does not suggest that Rule 14 may apply where only one of the two vessels can see both sidelights of the other. *Marsden and Gault on the Collisions At* Sea 15th.ed. by Tettenborn and Kimbell at paragraph 7-319 refers to the old Rule 18 and does not suggest there has been the radical change suggested by counsel for APOLLO. At paragraph 7-320 the editors refer to vessels "each" seeing both sidelights of the other almost ahead.
- 106. SYDNEY and APOLLO were not, in my judgment, meeting head-on, that is, on reciprocal or nearly reciprocal courses within the meaning of Rule 14 of the Collision Regulations. Rather, as from C-12 they were crossing so as to involve risk of collision within the meaning of Rule 15 of the Collision Regulations.

(3) Suggested reasons for not starboarding or reducing speed

107. It was also suggested on behalf of APOLLO that there were several reasons why it was not appropriate for APOLLO as the give-way vessel to slow speed and alter course to starboard. I shall comment on each of these but in considering them it is necessary to bear in mind that the crossing rules "ought to be strictly enforced because they secure safe navigation" (per Lord Wright), are a "bright light to navigators" and it is of the "highest importance to enforce themstrictly" (per Atkin LJ); see *Nautical*

Challenge v Evergreen Marine [2021] 1 WLR 1436 at paragraphs 43 and 44 per Lord Briggs.

- 108. First, it was suggested that by altering course to starboard and reducing her speed APOLLO would still have had to alter course to port to cross the southeast bound traffic flow at some point and would need to have accelerated when a suitable gap in the outbound traffic was identified. This is or may be true but it is hardly a reason for not complying with APOLLO's duty as the give way vessel. Second, it was suggested that the necessary sudden increase in speed and course alteration to cross the direction of traffic would have confused other vessels. But so long as the course alteration was bold and the increase in speed was ordered at a time when it was safe to do so there is no reason why any confusion would be caused to other vessels. Third, it was suggested that additional time would have been required to make the crossing and could have increased APOLLO's exposure to the southeast bound traffic flow. Assuming that this was likely to have happened it is hardly a reason for not complying with APOLLO's duty as the give-way vessel. Finally, it was suggested that APOLLO would not wish to proceed towards the local fishing vessels in the area near the termination of the main channel. But it is difficult to see why the required give way action would risk danger or embarrassment to the fishing vessels. One of the (agreed) plots shown to me (E1 p.9) plotted the fishing vessels in positions more than half a mile to the south west of APOLLO.
- 109. None of these points appeared to recognise the importance of complying with the crossing rules. The duty of the give way vessel pursuant to Rule 16 is to keep well clear of the other vessel "so far as possible". None of the points made was of sufficient cogency to enable APOLLO to say that is was not possible to keep well clear of SYDNEY.
- 110. It must follow that APOLLO's navigation from C-12 to C-6 was in breach of Rules 15 and 16 of the Collision Regulations. She failed to take action to keep well clear of SYDNEY by making a substantial alteration of course to starboard or by substantially reducing speed by C-7 at the latest and sought to cross ahead of SYDNEY.
- 111. The failure of APOLLO to keep well clear of SYDNEY led to APOLLO having SYDNEY 28 degrees on her starboard bow at C-4 at a distance of 1.69 miles with APOLLO set to cross ahead of SYDNEY whilst making good a speed of 15.5 knots. The CPA was predicted to be between 2 and 3 cables (between 1 and 2 cables on APOLLO's radar). The suggestion that the best way for APOLLO to keep well clear of SYDNEY and to avoid a collision was for APOLLO to maintain her course and speed and so cross ahead of SYDNEY ignores the circumstance that it was the duty of APOLLO to keep well clear of SYDNEY long before C-4 and to avoid crossing ahead of SYDNEY. In any event the CPA was very substantially below that which the Assessors advised was a safe passing distance if APOLLO were set to cross ahead of SYDNEY.

(f) Fault after C-4

112. At C-3.5 APOLLO's helm was put hard to starboard. This was action which ought to have been taken by C-7 at the latest. It was taken in circumstances where CHANG FA LONG had insisted on a port to port passing. It is likely that the action was taken because of that insistence. At that time the predicted CPA between APOLLO and CHANG FA LONG on APOLLO's radar was less than half a cable. The master in his statement somewhat surprisingly states that "there was no danger posed by CHANG FA LONG" and so he agreed to a port to port passing. There plainly was a danger. He next suggested

that his hard starboard order was to correct his course to the anchorage and to give CHANG FA LONG more sea room. It is not credible that the hard starboard order was to correct the course to the anchorage. It is more probable than not that the hard starboard helm order was given because CHANG FA LONG had insisted upon a port to port passing and APOLLO was now seeking to assist such a passing.

- 113. But less than half a minute later APOLLO's helm was put amidships. To apply hard starboard helm at C-3.5 and then put the helm amidships at C-3 suggests that the master of APOLLO had just appreciated the danger of collision with SYDNEY but was in great doubt as to what to do. He has stated that he ordered the helm amidships because he did not wish to confuse SYDNEY and because he wished to maintain his CPA with SYDNEY. It is difficult to accept that a master who had made several small helm alterations to port when there was a vessel on his starboard bow would be concerned about confusing the vessel on his starboard bow. In circumstances where the CPA with SYDNEY had, on APOLLO's own radar, been less than 2 cables since C-6 (though increasing) it is more likely than not that the master had just appreciated the danger of collision and did not know what to do.
- 114. Counsel for SYDNEY submitted that APOLLO's failure to maintain her hard starboard helm action was a further fault and, submitted, with the aid of "what if" plot no.6a., that this would have avoided a collision. It probably would (though at a passing distance of only 1-2 cables). But APOLLO's essential fault from which the failure to maintain her hard starboard helm flowed was in not taking early and substantial action to keep well clear of SYDNEY much earlier, by C-7 at the latest. Had she done so the close quarters situation in which she found herself at C-3.5 would never have arisen. The whole purpose of the crossing rule is to avoid such encounters that is inherent in the obligation to "keep well clear".

(g) Conclusion as to fault of APOLLO

115. Thus, in summary, although the bridge of APOLLO was manned by the master, chief officer, third officer and a lookout, there was a failure by the master to appreciate or understand how the vessels were approaching each other. He wrongly thought at C-10 that they were set to pass starboard to starboard when they were in fact set to pass port to port. This, coupled with his neglect of the crossing rule, caused him to fail to take early and substantial action to keep well clear of SYDNEY and instead led to him to seek to cross ahead of SYDNEY in flagrant breach of the crossing rule. This brought about the close quarters situation and the collision.

The faults alleged against SYDNEY

116. Counsel for APOLLO had many criticisms of the navigation of SYDNEY but they broadly related to lookout, speed and the alterations of helm to starboard from shortly after C-4.

Lookout

117. With regard to the lookout on board SYDNEY it was submitted that SYDNEY did not become specifically aware of, or take particular note of, APOLLO until after C-7. I am not able to accept this criticism. I have already noted in my account of SYDNEY's navigation that following the AIS alarm being triggered by APOLLO at C-11.5 the red and green sidelights of APOLLO were observed by the third officer. Both master and

third officer correctly assessed that APOLLO would pass astern of SYDNEY. The third officer had been asked to monitor APOLLO's movements and it is clear that he did so. The third officer gained the impression that APOLLO was slowly altering course to port and in consequence acquired her as a contact on his radar. This impression was correct. For at about C-9.75 APOLLO had indeed commenced a 10 degree alteration of course to port and the change of heading would have been apparent by C-9 when APOLLO's heading was 258 degrees. The fact that this was observed by the third officer and acted upon shows that the quality of his lookout was good. As a result of acquiring APOLLO as a contact the data of APOLLO became available at C-6.75.

- 118. It was also suggested that SYDNEY ought to have appreciated that APOLLO was proceeding to the anchorages to the south and so would have to cross the south east bound traffic flow at some time. However, the anchorage to which she was proceeding had not been identified by the port authorities and even at trial it was not clear to which anchorage she was proceeding. In any event APOLLO could have crossed astern of SYDNEY and the other vessels rather than ahead of them.
- 119. Further criticisms were made of SYDNEY's lookout in the minutes before collision but I shall deal with them later when considering SYDNEY's alterations to starboard.

Speed

- 120. With regard to the speed of SYDNEY it was submitted that her increase in speed between C-10 and C-2 from 10 knots to 11.4 knots was a breach of Rule 17(a)(i). The fact that she was proceeding at a speed in excess of her planned passage of 10 knots was also criticised as a breach of Rule 6.
- 121. I will deal first with the circumstance that her passage plan provided for a speed of 10 knots. The passage plan provided for a speed of 10 knots throughout the voyage to Australia. SYDNEY makes 10 knots when her engines are at slow ahead. It cannot have been intended that she would proceed to Australia at slow ahead. Rather, the provision for a speed of 10 knots in her passage plan must have been a predicted or intended average speed for the whole voyage. It cannot have been intended to limit the engine speed to slow ahead at all times. I do not regard the average speed of 10 knots in the passage plan as indicative of what would be a safe speed for SYDNEY in circumstances where she had left Tianjin.
- 122. At about C-16 SYDNEY advised Tianjin VTS that she was crossing the outbound reporting line (which was almost at the end of the buoyed channel from the port) and thereafter she commenced to alter course to port to make for the eastbound lane of the Caofeidian traffic separation scheme. At 2218 (C-14) she increased her engines to half ahead (40 rpm) and at 2219 (C-13) she increased them to full ahead manoeuvring (46 rpm). By this time SYDNEY's heading and course were 105° and 105°. The vessel's speed over the ground was 8.73 knots (but would increase since her engines had just been put to full ahead).
- 123. I asked the Assessors the following question:

When SYDNEY had crossed the outbound VTS reporting line towards the end of the buoyed channel from Tianjin and was making for the Traffic Separation Scheme at about C-13 on a course of about 105 degrees what was for her a safe speed pursuant to Rule 6 ? Was it unsafe to have put her engines at half ahead

at C-14 and to full ahead manoeuvring at C-13 ? (The plot of the vessels at C-13 can be found at D 17 and SYDNEY's radar screen shots at B1/19-22 and B2/108-111.)

124. I received the following answer:

Question: What was the safe speed of SYDNEY pursuant to Rule 6?

Answer: We consider her safe speed was full ahead manoeuvring. The visibility was good, their sensors were operational, there were no navigational dangers, other traffic heading east was at similar speed. At full ahead manoeuvring they had sufficient time to assess any approaching shipping contact.

Question: Was it unsafe to have put her engines at half ahead at C-14 and to full ahead manoeuvring at C-13?

Answer: We do not consider it unsafe to have increased speed. The increase made a small change to the time to CPA but had minimal impact on the time for either bridge team to assess risk of collision and their subsequent actions.

- 125. Counsel for APOLLO submitted that I should not accept this advice. Reliance was again placed on the passage plan but I have already explained why, in the circumstances of this case, that is an unpersuasive point. There is no cogent reason not to accept the advice of the Assessors and I accept it.
- 126. It must follow that SYDNEY did not proceed at an unsafe speed.
- 127. Counsel for APOLLO submitted that SYDNEY's duty to maintain her speed as the stand on vessel was breached because her speed over the ground increased from 9.21 knots at C-12 knots to 11.4 knots at C-2. However, throughout this period her engine speed remained at full ahead manoeuvring and the increase in speed was simply the result of her engines working at full speed.
- 128. Rule 17 requires the stand on vessel to keep her "speed". In *Nautical Challenge v Evergreen Marine* Lord Briggs explained at paragraph 62 that this obligation does not require the stand on vessel to maintain her "precise" speed. "If the nautical manoeuvre upon which she is visibly engaged when she becomes the stand-on vessel involves altering her heading or course, or slowing down, she may do so without undermining the obligation of the give-way vessel to keep clear. She may for example be altering course or slowing down to pick up a pilot."
- 129. An example of this approach to the duty of a vessel to keep her speed is *The Cederic* 19 (1924) Ll. List L.R. 391at p.393 where Hill J. held that a vessel being overtaken had not failed to keep her speed when her engines were at full ahead and so "for twenty minutes of thereabouts before the collision her speed was increasing as her engines developed their capacity".
- 130. In the present case SYDNEY, having left the buoyed channel (in fact the water to the south of the buoyed channel) increased speed from slow ahead to half ahead and then to full ahead at C-13 to make for the traffic separation scheme. Her engines were put to full ahead to enable her to work up to an appropriate speed for proceeding to the separation scheme. This was visible to the master of APOLLO who said in his witness statement

that he observed that SYDNEY had altered course to port to head for the traffic separation scheme and had increased her speed. Thus the nautical manoeuvre upon which SYDNEY was visibly engaged involved her increasing her speed through the water. SYDNEY kept her engines at full ahead at all material times. In my judgment the fact that SYDNEY's speed through the water increased was not a breach of her duty to keep her speed. The increase in her speed through the water was the necessary consequence of the manoeuvre upon which she was visibly engaged.

131. In the light of my finding that the speed of SYDNEY was safe I need not consider a submission made by counsel for APOLLO that her duty to keep her speed required her to reduce her speed to a safe speed. This submission was based upon Lord Briggs' statement in *Nautical Challenge v Evergreen Marine* at paragraph 69 that the stand on obligation may be "moulded for the purpose of permitting compliance with" another rule. A decision on this interesting question must await a case when it arises on the facts.

Alteration of course to starboard

132. Rule 17(a)(i) provides that the stand-on vessel shall keep her course and speed. Rule 17(a)(ii) provides that the stand-on vessel "may however, take action to avoid collision by her manoeuvre alone, as soon as it becomes apparent to her that the vessel required to keep out of the way is not taking appropriate action in compliance with these Rules." With regard to SYDNEY's alteration of course to starboard after C-4 it was submitted that such alteration was a breach of Rule 17 and that had SYDNEY maintained her course and speed there would have been no collision.

(a) Lookout

- 133. In this context criticism was again made of the lookout on board SYDNEY. It was submitted that SYDNEY assumed that APOLLO was not shaping to pass ahead despite the clear evidence to the contrary on the radar of SYDNEY from C-5.5.
- 134. It is correct that from C-5.5 the radar of SYDNEY began to predict that APOLLO would cross ahead of SYDNEY but at a small distance, initially at a distance of 0.07 nm (under a cable) increasing to 0.44 nm (over 4 cables) at C-3.
- 135. It is unlikely that the master and third officer were unaware of what the radar was predicting. Their lookout had been good from C-11.5 until C-6.75 (see paragraph 116 above). Having specifically acquired APOLLO as a contact it is unlikely that the information provided by the radar was ignored. The evidence suggests that it was not ignored.
- 136. As I have noted when recounting the navigation of SYDNEY it was at C-6.5 that the master asked the third officer what the target was "ahead". APOLLO was bearing 20 degrees on the port bow of SYDNEY at a distance of about 2.5 miles. The third officer said that it was APOLLO and that the CPA was 0.02 nm, which it was according to SYDNEY's radar. The audio transcript shows that the master and third officer discussed what SYDNEY was going to do. At about C-5.5 the master said "he will not cross, will go from her stern" but then asked "is she crossing ?". The third officer replied that he did not know. There was, it seems, doubt in the minds of both the master and third officer as to whether APOLLO would pass astern or cross ahead of HAI YANG SHI YOU 633.

- 137. Until about C-5.5 the radar of SYDNEY was showing that APOLLO was to pass astern of SYDNEY, though the distance at which she would do so was falling. This was because APOLLO had made two small (5 degree) alterations to port at C-8 and C-7. APOLLO made a third small (5 degree) alteration of port at C-6. The master has stated that he continued to believe that APOLLO would pass astern because otherwise APOLLO would have to cross ahead not only of SYDNEY but of three other vessels. Having regard to the crossing rule that was not an unreasonable belief.
- 138. The master said that he was becoming concerned that APOLLO was not altering to starboard as he expected she would (which itself suggests a good lookout) and he thought that he might have to alter course to starboard but he had CHANG FA LONG on his starboard side. The master heard the VHF conversation between SYDNEY and CHANG FA LONG (between C-4 and C-3.5) at the end of which a port to port passing was agreed. He observed that CHANG FA LONG was altering to starboard and considered that that gave SYDNEY room to do so also. He said that he then altered course to 120 degrees. In fact, he began his alteration to starboard (110 and 115 degrees) during the course of that conversation. In his supplementary statement he said that he was seeking to give APOLLO room to turn to starboard. Thus he still expected APOLLO to turn to starboard and pass port to port.
- 139. The master does not refer to the fact that his radar was showing that between C-5.5 and C-3 APOLLO was predicted to cross ahead of SYDNEY and at an increasing distance. But his evidence shows that he rightly concluded by C-3.75 that APOLLO was crossing ahead of HAI YANG SHI YOU 633 ("crossing completely"). That conclusion was consistent with what his radar was showing and suggests a good lookout. His evidence shows that he was considering whether, notwithstanding CHANG FA LONG on his starboard side, he could turn to starboard to give APOLLO more room to turn to starboard. He concluded that he could do so and did so.
- 140. The radar on SYDNEY indicated that APOLLO was set to cross ahead of SYDNEY from about C-5.5. I must therefore accept that the master could have concluded by about C-4 that that was APOLLO's intention. It is likely that the master was aware of what his radar was predicting but continued to believe that APOLLO would turn to starboard as was her duty. The situation facing the master was confusing. The audio transcript shows that the master and third officer were carefully considering from C-5.5 what APOLLO was doing ("is she crossing ?", "I don't know"). It is therefore unlikely that they were unaware of what the radar was predicting. APOLLO had previously been set to pass astern of SYDNEY and it was her duty to keep well clear of SYDNEY and not to cross ahead of SYDNEY. Whilst the radar indicated that APOLLO would cross ahead of SYDNEY, the CPA, although increasing, was never more than 0.3 nm., an unsafe distance. Moreover, between C-4 and C-3.75 APOLLO had agreed to a port to port passing with CHANG FA LONG which indicated that APOLLO would turn to starboard. Yet at the same time (and to add to the confusion) the master and third officer concluded that APOLLO was "crossing completely" and the third officer reported to the master that the radar was predicting a CPA of 0.26 nm., clear evidence that regard was being had to what the radar was predicting. APOLLO then altered course to starboard at C-3.5, which alteration the third officer observed at C-3 and led the master to say at C-2.75 "he will come out". That observation must have confirmed the master's belief that APOLLO would pass port to port.

- 141. I am not persuaded that in this confusing situation it was negligent of the master of SYDNEY not to conclude by C-4 or C-3.5 that APOLLO was in fact intent on crossing ahead of SYDNEY in breach of the crossing rule. I accept that, despite what the radar was predicting, the master continued to believe that APOLLO would, albeit belatedly, turn to starboard. But in addition to what the radar indicated, the master's aural lookout (listening to the VHF conversation between APOLLO and CHANG FA LONG) informed the master that APOLLO was likely to turn to starboard, as indeed she did.
- 142. In her submissions counsel for APOLLO submitted that if the master of SYDNEY was in doubt as to what APOLLO was doing he ought to have enquired of APOLLO by VHF what she was doing. Doubt arose in the mind of the master at about C-5.5. It arose because APOLLO, instead of taking early and substantial to keep well clear of HAI YANG SHI YOU 633, SYDNEY and CHANG FA LONG, had made small alterations of helm to port. There are well-known dangers in contacting vessels by VHF. One is that there may be confusion as to who is speaking to whom. This actually happened in this case when APOLLO was in contact with SHEN HUA 536 at about C-7. Another is that valuable time can be lost by such conversations. The time after C-5.5 was not the time for initiating a VHF conversation with APOLLO. What was required was a careful lookout. That was maintained. The audio transcript records the master appreciating at C-3.75 that APOLLO was "crossing completely" and third officer informing the master at C-3.5 that APOLLO's CPA was 0.26 nm (as indeed it was on SYDNEY's radar). The transcript also records the third officer informing the master at C-3 that APOLLO was altering to starboard (as indeed she had done at C-3.5). This was not the time at which to interrupt a careful lookout by making a VHF call. It was further suggested that SYDNEY ought to have agreed safe passing arrangements with APOLLO. But the crossing rule required a port to port passing whilst the only passing arrangements APOLLO wanted were in breach of the crossing rules. SYDNEY cannot be at fault for not making such arrangements. As Lord Briggs said in The Nautical Challenge v Evergreen Marine at paragraph 66 "compliance with the Rules is a first principle of good seamanship".

(b) Action pursuant to Rule 17(a)(ii)

- 143. The case of APOLLO is that SYDNEY ought to have maintained her course and speed in accordance with Rule 17(a)(i) of the Collision Regulations and that SYDNEY ought not to have altered course to starboard pursuant to Rule 17(a)(i).
- 144. I therefore asked the Assessors the following question

At C-4 APOLLO was bearing 17 degrees on the port bow of SYDNEY at a distance of 1.69 miles, SYDNEY was making good a course of 105 degrees and a speed of 11.27 knots and APOLLO was making good a course of 242 degrees and a speed of 15.5 knots. If it appeared to SYDNEY that APOLLO was not taking appropriate action in accordance with the Collision Regulations:

(a) Was the helm action which SYDNEY took at about C- 4 to alter course progressively to starboard (to 120° at about C-3.25) the appropriate action to take pursuant to Rule 17(a)(ii)? If not what further or alternative action (if any) ought to have been taken by SYDNEY at C-4 to avoid collision pursuant to Rule 17(a)(ii) ? (b) In particular should SYDNEY have maintained her course and speed from C-4 or reduced speed to 10 knots over the ground as illustrated by TMC's "What If" Plots Nos. 4 & 5 ?

(The plot of the vessels at C-4 can be found at D p.26 (large scale at D p.40) and Plots Nos. 4 & 5 which illustrate the action which APOLLO alleges that SYDNEY should have taken at C-4 can be found at E2 pp.7-8).)

145. I received the following answer

Answer: We consider this was the appropriate action. Despite being close to CPA, the intentions of the Master of APOLLO remained unclear, as they had been since C-12, with APOLLO's three course changes and various conversations on VHF creating uncertainty. The Master of SYDNEY could hear the VHF exchange between APOLLO and HI YANG SHI YOU and then CHANG FA LONG at C-4.13 and we consider he had to start taking action in accordance with Rule 17(a) (ii) at that time. Starting his bow moving to starboard away from APOLLO on his port bow was a safe option, however SYDNEY had CHANG FA LONG 0.3 nm slightly astern to starboard. It was only when CHANG FA LONG turned down the starboard-to-starboard pass request from APOLLO at C-4.0 and started making a substantial turn to starboard, in accordance with Rule 17(a)(ii) and when SYDNEY was able to assess this, sometime after C-3.0 (allowing one minute) that SYDNEY could consider altering course to starboard more substantially.

SYDNEY could have reduced speed substantially, but this risked slowing down just as APOLLO made a last moment alteration to starboard to go under SYDNEY's stern, as they did at C-3.36. Suddenly reducing speed may have put them back into danger as APOLLO went round their stern.

Question: In particular should SYDNEY have maintained her course and speed from C-4 or reduced speed to 10 knots over the ground as illustrated by TMC's "What If' Plots Nos. 4 & 5 ?

Answer: SYDNEY's Master should have been considering his options under Rule 17(a) (ii). At C-4 APOLLO's intentions remained unclear, which complicated the decision on SYDNEY's bridge. Maintaining speed or a reduction of speed by 1.4 knots to 10 knots may have resulted in the ships passing very close (less than 400 metres but not actually colliding), however both resulted in close quarters situations where risk of collision existed. Given the equipment available to aid the Master of SYDNEY, neither option would have complied with Rule 17(a) (ii), even if their outcomes may have resulted in a close miss rather than a collision. We do not consider this slight reduction in speed to have been a viable collision avoidance manoeuvre given the large sizes of the vessels involved and their relative lack of manoeuvrability.

- 146. Counsel for APOLLO submitted that this advice should not be accepted.
- 147. First, it was said that the advice is flawed because it assumes that the intentions of APOLLO were unclear when a good lookout would have shown that APOLLO was to cross ahead of SYDNEY. I have already described the confusing situation which faced

the master and explained why I do not accept that SYDNEY was guilty of poor lookout in failing to appreciate that APOLLO was in fact intent on crossing ahead of SYDNEY; see paragraphs 133-141 above. I agree that the intentions of APOLLO were unclear.

- 148. Second, it is said that the Assessors were in error in saying that SYDNEY heard the VHF discussion between APOLLO and HAI YANG SHI YOU 633. This error was also pointed out by counsel for SYDNEY. The conversation between APOLLO and HAI YANG SHI YOU 633 appears to have been on channel 6, whilst SYDNEY was listening on channel 16. I accept that the Assessors were mistaken in that respect but I do not consider that their error vitiates their view that the intentions of APOLLO were unclear. I reached the same conclusion. It was suggested that that the master ought to have heard the conversation between APOLLO and HAI YANG SHI YOU 633 but, assuming that he could and should have done so, it is unlikely that it would have made any material difference. The master would have learnt earlier than he did (by observation) that APOLLO was to pass HAI YANG SHI YOU 633 starboard to starboard but that would not have clarified the intentions of APOLLO with regard to SYDNEY, especially in circumstances where shortly afterwards APOLLO agreed to pass CHANG FA LONG port to port. In any event, although SYDNEY knew that SHEN HUA 536 and APOLLO had agreed to communicate on channel 6, it was not explained why SYDNEY ought to have put one VHF on channel 6 in order to hear conversations between APOLLO and HAI YANG SHI YOU 633 of which SYDNEY was unaware. SYDNEY was keeping a good aural lookout on VHF channel 16. This was not a matter discussed or explored at trial.
- 149. Third, it was submitted that the Assessors ought to have advised that SYDNEY's progressive alterations to starboard were in breach of Rule 17(a)(ii) and that they were not caused by anything APOLLO was doing. The latter point is odd. Action pursuant to Rule 17(a) (ii) is only permissible when it appears that the give-way ship is not taking appropriate action in accordance with the crossing rule and it is, in my judgment, inescapable that APOLLO had not taken appropriate action by reason of her failure to take early and substantial action to keep well clear of SYDNEY. As to the first point, action pursuant to Rule 17(a)(ii) must, I accept, be appropriate and seamanlike. I further accept that action ought generally to be bold rather than progressive; see Rule 8(b) which requires action to avoid collision to be "large enough to be readily apparent to another vessel". But the circumstances of the case must "admit" such action and so must be carefully examined before one concludes that a stand-on vessel, faced with a give-way vessel which is not taking appropriate action in accordance with Rules 15 and 16, has herself taken inappropriate and unseamanlike action. In the present case the master of SYDNEY had heard CHANG FA LONG demand a port to port passing with APOLLO and APOLLO demand a starboard to starboard passing, before a port to port passing was agreed; see paragraphs 27-32 above. The master still expected APOLLO to turn to starboard and was concerned "to give APOLLO as much sea room on my port side as I could for him to alter to starboard"; see paragraph 33 above. When CHANG FA LONG was seen to be altering course to starboard (see paragraph 33 above) the master was able to turn further to starboard. Thus in this case there are special circumstances explaining and justifying the progressive alterations to starboard. They did not permit (or admit) of larger alterations to starboard.
- 150. Fourth, it was submitted that if SYDNEY had maintained her course and speed there would have been no collision. That is or may be true (based upon the "what-if" plots to which I was referred), though the distance at which APOLLO would have crossed ahead

would have been less than 5 cables. The mere fact that collision would have been avoided does not prove that SYDNEY was at fault in deciding to alter course to starboard pursuant to Rule 17(a)(ii). Whether the action was at fault depends upon the circumstances of the case. In the present case the circumstances explain and justify SYDNEY's starboarding. Indeed had APOLLO maintained her hard starboard helm, instead of putting her helm amidships, there would have been no collision. There is, it seems to me, force in the observation made by counsel for SYDNEY that the problem was that APOLLO aborted her starboard turn.

- 151. It follows that SYDNEY was not at fault by reason of her starboard helm action between C-4 and C-3 when, pursuant to Rule 17(a)(ii), she was entitled to take action. I accept the advice of the Assessors that altering to starboard away from APOLLO on her port bow could reasonably have been thought a means of avoiding collision. SYDNEY was not at fault in failing to maintain her course and speed at that time.
- 152. It was submitted orally that if action were required SYDNEY ought to have altered course to port (see Day 2 p.149 line 14 p.150 line 11). But Rule 17(c) provides that if the circumstances of the case admit the stand-on vessel should not alter course to port for a vessel on her own portside. Since SYDNEY was able to alter course to starboard the circumstances of the case permitted (or admitted) SYDNEY to avoid altering course to port. It may be that it can now be shown that had SYDNEY gone to port the collision would have been avoided but the Rules did not allow SYDNEY to take such action. In any event starboard helm action was justified in the circumstances as they appeared to the master at the time.
- 153. I therefore do not accept that SYDNEY was at fault in failing to alter course to port.

(c) Action pursuant to Rule 17(b)

- 154. Rule 17(b) provides that where the stand-on vessel finds herself "so close that collision cannot be avoided by the action of the give-way vessel alone, she shall take such action as will best aid to avoid collision." Counsel for APOLLO criticised SYDNEY for the action she took pursuant to Rule 17(b), namely, applying hard starboard helm at C-1.5. Again in her oral submissions counsel said that that SYDNEY ought to have gone to port (see Day 2 p.153 lines 9-14). The suggestion made was that such action would have negated the effects of the earlier starboarding.
- 155. I therefore asked the Assessors the following question

At C-2 APOLLO was bearing 24 degrees on the port bow of SYDNEY at a distance of 0.87 miles, SYDNEY was making good a course of 110 degrees and a speed of 11.4 knots and APOLLO was making good a course of 250 degrees and a speed of 15.3 knots. If collision could not be avoided by the action of APOLLO alone at or shortly after C-2 what action by SYDNEY would have best aided to avoid collision pursuant to Rule 17(b) ?

(The plot of the vessels can be found at D p.28 (large scale at D p.44) and Plots Nos. 6 & 7 illustrate the action which APOLLO alleges that SYDNEY should have taken at C-2 can be found at E2 pp.9-10, the latter proceeding on the basis that SYDNEY had maintained 10 kts from about C-10 as well as altering to port at C-2.)

156. I received the following answer.

Answer: At C-2 or shortly after, the only action available to SYDNEY in accordance with Rule 17(b) was to put the rudder hard to starboard, away from APOLLO, combined, perhaps, with a reduction in speed. This alteration of course was ordered at C-1.31.

The assessors consider the factors the Master of SYDNEY had to take into account when he was considering his actions under Rule 17 (b) were far from straightforward. The transcript at D-8 and D-105 illustrate this. At C-5.21 he heard APOLLO agree a starboard to starboard pass with HAI YANG SHI YOU on the port side of SYDNEY, and at C-3.31 the same option turned down by CHANG FA LONG on SYDNEY's starboard side. At C- 3.36, having crossed the bow of HAI YANG SHI YOU, APOLLO went hard to starboard and appeared to be shaping to pass SYDNEY port to port in compliance with Rule 15. This was seen on SYDNEY at C-02.47. A reduction in speed by SYDNEY may have hindered APOLLO as their initial intention indicated crossing astern of SYDNEY. APOLLO then stopped the turn to starboard and the Master of SYDNEY was faced with another developing close quarters situation with APOLLO. At C-2.14 APOLLO initiated a VHF conversation in which, at this late stage, he requested a starboard to starboard passing, despite being on the port bow of SYDNEY. The conversation ended in disagreement and with the ships less than 5 cables apart, SYDNEY went hard to starboard at C-1.31 and APOLLO went hard to port at C-1.13.

- 157. The Assessors are in error when noting that SYDNEY had heard the conversation between APOLLO and HAI YANG SHI YOU 633 but I do not consider that this undermines their advice. What is significant is that, whilst at C-3 it had been observed (correctly) that APOLLO was turning to starboard, by C-1.5 APOLLO was demanding a starboard to starboard passing. It is not surprising that in such circumstances the master said "what the fuck ?" and ordered hard starboard helm. Such action would move SYDNEY further away from APOLLO which was to port of SYDNEY. I accept the advice of the Assessors.
- 158. Counsel for APOLLO submitted in response to this advice that SYDNEY ought to have agreed a starboard to starboard passing (SHEN HUA 536 and HAI YANG SHI YOU 633 had passed APOLLO starboard to starboard) and to this end implemented hard to port helm at C-2. It was further submitted that, had this been done, a "what-if" plot indicated that there would have been no collision. It was suggested that the Assessors' advice was "unfathomable".
- 159. I do not accept the suggestion that shortly before C-2 SYDNEY ought to have agreed by VHF a starboard to starboard passing. Such a passing would have been in breach of the crossing rule because it would require APOLLO to cross ahead of SYDNEY. SYDNEY can hardly be blamed, in circumstances where it had correctly been observed at C-3 that APOLLO was turning to starboard, for requiring a port to port passing in accordance with the crossing rule.
- 160. The fact that an alteration of course to port would have avoided a collision does not mean that it was the appropriate action to take. The appropriate action depends upon all the circumstances of the case and in particular the requirements of Rule 17(c) which provides

that if the circumstances of the case admit the stand on vessel should not alter course to port for a vessel on her portside. In the present case APOLLO, having (albeit briefly) altered course to starboard, appeared to be intent on passing port to port. SYDNEY was able to increase her starboard turn away from APOLLO by applying hard starboard helm. In those circumstances I accept the advice of the Assessors that the "only" action available to SYDNEY was hard starboard helm action. I am unable to accept that the Assessors' advice was "unfathomable".

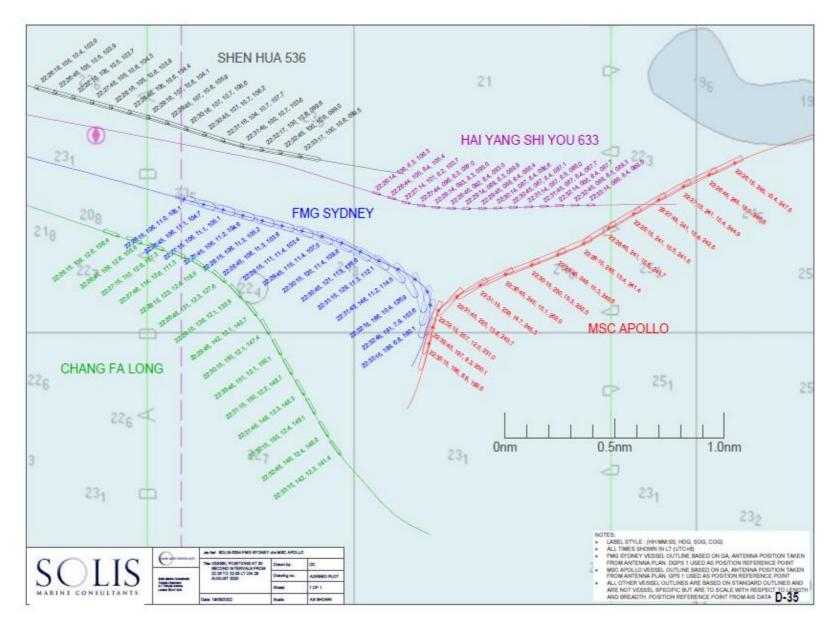
(d) Sound signals

161. Lastly, SYDNEY was criticised for not making sound signals indicating her alterations to starboard. It is true that she did not make any such sound signals, contrary to Rule 34(a). She commenced turning to starboard just after C-4. APOLLO had agreed with CHANG FA LONG to pass her port to port and in consequence APOLLO put her helm hard starboard at C-3.5. However, very shortly after that (and as I have explained above) the master of APOLLO realised the risk of collision with SYDNEY and put his helm amidships. Had SYDNEY indicated her alteration of helm to starboard at C-4 or C-3.5 it is possible that APOLLO might have realised the risk of collision a little earlier than he in fact did. But what he would have done in circumstances where he was agreeing passing arrangements with CHANG FA LONG by VHF is very difficult to say. Counsel for APOLLO did not explain how the fault was causative. The likelihood is that the master of APOLLO would have put his helm amidships as he in fact did when he appreciated the risk of collision with SYDNEY and then contacted SYDNEY, perhaps a little earlier than he in fact did. But he would then have wasted time in debating with SYDNEY how they would pass, as he in fact did. It is not possible to find on the balance of probabilities that the collision would not have occurred.

Conclusion

- 162. Since I have found causative fault on the part of APOLLO and no causative fault on the part of SYDNEY it follows that APOLLO must be held solely responsible for the damage caused by the collision.
- 163. This case illustrates the importance of vessels complying with the crossing rule, the purpose of which is to avoid the development of a close quarters situation. Had APOLLO been mindful of its obligations as the give-way vessel the close quarters situation and resulting collision between APOLLO and SYDNEY would never have occurred. Navigation will be safer if mariners observe and heed the "bright light" of the crossing rule.

C-6



C-18

