

A collision between the M.V. Ever Smart and M.V. Alexandra 1 on the 11th Feb.2015 off Jebel Ali, has been the subject of both an investigation report by the Marine Accident Investigation Bureau (MAIB) and a judgement of the English Admiralty Court.

The main purpose of the MAIB investigation is to identify all the failures giving rise to the collision for the benefit of all interested parties in order to prevent future accidents; whereas the purpose of the Court's judgement is to attach liability by apportioning blame between the two ships.

The latter is nevertheless very useful to mariners especially in this case as the Court was specifically asked to clarify whether the crossing rule applies in instances where one vessel was navigating along a narrow channel and another vessel navigating towards the channel in preparation for entering it. The Court considered the applicability of the crossing rule before considering the respective faults of each ship.

The MAIB report:

The collision occurred at night in clear skies and good visibility between two laden ships, the EVER SMART and ALEXANDRA 1 close to the entrance to the buoyed approach channel into Jebel Ali, United Arab Emirates.

The channel leading to Jebel Ali lay on an axis of 315/135 degrees and was about 8.5nm in length with a width of slightly less than 2 cables. It was marked by lateral buoys, from buoys no.1 at the seaward end and no. 12 at the outer breakwater.

EVER SMART, a 75,246gt container ship, departed the port via the main channel at 12 knots with the Master, pilot, 3rd Officer and an able seaman at the helm on the bridge. The ALEXANDRA 1 was a tanker of 79,779 gt loaded with 113,000mt of condensate, which was moving very slowly from the short-term anchorage to the channel to pick up the pilot from EVER SMART.

The following events took place,

2248hrs During the hours of darkness, the Master of ALEXANDRA 1 reported to the Jebel Ali Vessel Traffic Service Officer ('VTSO') by VHF that the tanker had weighed anchor and was underway. VTSO replied advising the tanker to "proceed to buoy No1. Keep watch all of the time".

2251 Alexandra 1's engine telegraph was set to 'half ahead' and the tanker moved towards the entrance to the buoyed channel . On the bridge were the master, third officer and an AB at the helm.

2256 VTSO advised the Alexandra I that its intended pilot was on board the container ship

Ever Smart and authorised the tanker to enter the channel as soon as the container ship was clear of the No1 buoys. The master acknowledged.

2312 *Alexandra 1's* Master observed by radar that *Ever Smart* was passing No8 buoys. He realised that *Ever Smart* would not be clear of the channel for some time.

2314 *Alexandra I* set the engine telegraph to 'stop'. The master expressed some frustration at being off the channel entrance earlier than was necessary.

2319 *Alexandra* 11.058nm from No1 buoys, making good a course over the ground of 126° at 2.2kts.

2328 The tug *Zakheer Bravo* called VTSO by VHF and requested permission to cross the pilot embarkation area. VTSO asked the tug's skipper "*can you see the big tanker waiting?*" The tug's skipper advised that he could and then the VTSO instructed him to "*cross 1nm astern of the tanker*". *Alexandra 1's* master heard part of this radio exchange and assumed that VTSO was talking to *Ever Smart*. The Master assessed that in order to pass astern of his vessel, *Ever Smart* would alter course to port on clearing the channel. (Recordings of the VHF communications during the evening of 11 February showed that channel 69 was very busy with exchanges frequently being interrupted and over-spoken.)

2331 *Ever Smart* was approaching No3 buoys, the pilot and the master discussed the pilot's disembarkation and warned the master of the presence of the *ALEXANDRA 1*;

Pilot	<i>So captain, the time has come for me to go. Just follow the channel</i>
Master	<i>Do you think I can go myself?</i>
Pilot	<i>Yes, yes. There is this coming now. There is just the one ship. Only this tanker</i>
Master	<i>Yes, yes</i>
Pilot	<i>It's coming. It will wait.... Anyway I go there beforeokay captain</i>
Master	<i>Yes, yes</i>

Alexandra 1 was visible from *Ever Smart's* bridge, the tanker was 7.7 cables from the channel entrance and maintaining a heading of 100° at 1.8kts. The tanker appeared on the radar displays but, despite being identified by the pilot, was not acquired as an ARPA target by *Ever Smart's* bridge team.

2334 The pilot left the bridge accompanied by the Master and 3rd officer having advised *Ever Smart's* Master to reduce speed to 10kts and to maintain a course over the ground of 314°. The

master ordered the helmsman to steer 319° and adjusted the port radar display to 'north-up' . By eye, he estimated that the tanker would pass down the container ship's port side at a distance of 1.5 cables.

2340 Alexandra 1's master increased the engine speed to 'slow ahead;' the tanker's speed was about 2kts and it remained on an easterly heading.

2340:30 Ever Smart passed between the No1 buoys at a speed of 11kts . The third officer returned to the bridge and, on instruction from the master, he rang 'full away' with an engine setting of 80rpm. The helmsman continued to steer 319°.

Alexandra 1's Master saw Ever Smart pass between the No1 buoys and became concerned that the container ship had not altered course to port as he had expected. The following VHF exchange took place ;

2341:28	Alexandra 1 (Master)	<i>Jebel Ali port control this is Alexandra 1 come in. Container not changing course. This is collision</i>
	VTSO	<i>I told him. Are they clear of buoy No1 then you will be entering the channel I said</i>
	Alexandra 1 (Master)	<i>He's going to collision to me now!</i>

During these VHF transmissions, Alexandra 1's engine telegraph was set to 'full astern'; the tanker's deck lights and external accommodation lights were also switched on.

2341:48	VTSO	<i>Ever Smart this is Jebel Ali port</i>
2341:52	Ever Smart (third officer)	<i>Jebel Ali port this is Ever Smart. Good morning ...</i>
2341:55	VTSO	<i>Are you clearing to starboard please? We have the tanker there coming to enter the channel... [overspoken]</i>
2341:55	Pilot	<i>Ever Smart, Hard to starboard! Hard to starboard! Hard to starboard!</i>
2342	Alexandra 1 (master)	<i>Hard to ***** starboard Hard to starboard. Ever Smart hard to starboard.</i>

At 2342:12, Ever Smart's master ordered 'OK hard to starboard' and then exclaimed "what's that?" Three seconds later, at 2342:19, Ever Smart and Alexandra 1 collided bow to bow. They were 4 cables from the No1 buoys.

The MAIB Analysis

While Alexandra 1 was waiting for the container ship to clear the channel, she closed towards the

channel entrance due to a combination of 'dead slow ahead' engine movements and drift. No attempt was made to check the movement to the east. By itself, *Alexandra 1's* proximity to the channel entrance was not hazardous providing the masters of both vessels were aware of the other's intentions. As soon as the tanker's master mistook the VTSO's instruction to '*pass astern of the tanker*' as an instruction to *Ever Smart* rather than *Zakheer Bravo*, his perception of how the vessels would pass differed dramatically from that of *Ever Smart's* master. *Alexandra 1's* master assessed that *Ever Smart* would need to alter course to port on leaving the channel in order to pass astern as a result he manoeuvred the tanker slowly ahead. The tanker's master was not aware that the container ship's master did not intend to alter course.

At the time of the pilot's departure, *Ever Smart* was following the channel as intended. *Alexandra 1* was 2.9nm off the container ship's port bow and the tanker was not impeding *Ever Smart's* passage to seaward. Moreover, the pilot had informed the master that the tanker would wait for *Ever Smart* to clear the channel. Therefore, it was reasonable for the master to assume that the tanker would pass down the container ship's port side.

The MAIB found that the collision between *Ever Smart* and *Alexandra 1* stemmed from the vessels' masters having differing perceptions of how the vessels would pass each other. The actions of both masters put their vessels on a constant bearing. Within 1 minute of *Ever Smart* leaving the channel, *Alexandra 1's* master noticed that the container ship had not altered course as he had expected. He then acted immediately to try and prevent a collision. Having failed to monitor *Alexandra 1*, it was too late for the master of *Ever Smart* to take any effective avoiding action by the time he was alerted by the VHF calls immediately before the collision.

The reliance of *Alexandra 1's* master on scanty VHF information and the failure of *Ever Smart's* master to keep a proper lookout and monitor *Alexandra 1's* movement were pivotal to this accident. However, it is also evident that a lack of an agreed plan and effective communication, co-ordination and monitoring were significant factors, which contributed to the flaws in *Ever Smart's* and *Alexandra 1's* masters' situational awareness.

The MAIB further concluded, amongst others, that,

- The precautions of pilotage and VTS in Jebel Ali, which should have been able to manage and de-conflict the vessels' movements, were ineffective. The VTSO's instructions to *Alexandra 1* resulted in the tanker arriving off the buoyed channel 25 minutes earlier than was necessary and no action was taken to stop the tanker from slowly moving towards the channel's entrance.

- Alexandra 1's* master did not appreciate the danger of straddling the slow-moving, relatively un-maneuverable tanker across the line of the buoyed channel just 4 cables from its entrance.

- During the 8 minutes from the pilot's disembarkation until the collision, *Ever Smart's* bridge team did not monitor *Alexandra 1's* position and movement. Both the master and the third officer lost situational awareness.

- The decision of *Alexandra 1's* master to call Jebel Ali port control, rather than calling *Ever Smart* when he realised the container ship had not altered course, cost valuable seconds.

-The VTSO's VHF exchanges with *Alexandra 1* and *Ever Smart* immediately before the collision indicate that he did not know how to communicate effectively in an emergency. (To ensure clarity and increase the probability of a message being understood, IALA has developed the following message markers: Instruction, Advice, Warning, Information, Question, Answer, Request and Intent).

-The pilot's failure to co-ordinate and communicate the passing arrangements for *Ever Smart* and *Alexandra 1* was significant. The pilot's disembarkation from *Ever Smart* was premature.

-The *Alexandra 1* did not switch the AIS on which could have contributed to the master being unaware of the container ship's identity.

The judgement of the Admiralty Court

The main issue in dispute was whether Rule 15 of the COLREGS, namely the crossing rule, applied within the vicinity of a narrow channel. It was necessary to resolve this before considering the respective alleged faults of each vessel. Rule 15 provides that,

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

The applicability of the crossing rule

It was argued that ALEXANDRA 1 had EVER SMART on her starboard bow and was therefore under a duty to keep out of the way of EVER SMART. ALEXANDRA 1 interests argued, based on authority, that the crossing rule had very limited, if any, application to questions of navigation in and around a narrow channel and, in particular, did not apply to a vessel navigating towards that channel in preparation for entering it. It was also argued that the 'crossing situation' had only come about by reason of EVER SMART's failure to navigate on the starboard side of the channel and, as such, that the EVER SMART could not rely upon the 'crossing rule' when it had created the crossing situation by its own fault.

Although, ALEXANDRA 1 had EVER SMART on her starboard bow along the narrow channel which it wished to enter, the Court rejected any arguments that the 'crossing rule' applied, citing Lord Clarke in Kulemesin v HKSAR [2013] 16 HKCFA 195, that "*...vessels approaching a narrow channel and intending to proceed along it are not bound by the crossing rule but must enter the channel and, as they do so, keep as near to the starboard side as is safe and practicable in accordance with Rule 9. It seems to me to follow that a vessel shaping to enter the channel should, as a matter of good seamanship, navigate in such a manner that, when she reaches the channel, she is on the starboard side of the channel in accordance with Rule 9.*"

It was held that the 'crossing rule' could not apply at the same time as the 'narrow channel' rule due to the requirements under the rules being different. The vessel in a narrow channel with a vessel on its port bow on a crossing course could not be under a duty, pursuant to the 'crossing

rule,' to maintain its course and speed and at the same time be under a duty to keep to the starboard side of the channel, as per the 'narrow channel' rule as both rules could require different courses of action. Lord Clarke continued, "...*Safety requires a vessel approaching the channel so as to proceed along it to navigate so that if the vessels pass in the channel they will pass port to port. This will be achieved if the narrow channel rule applies. If it does not, there is considerable scope for confusion.*"

The Court then considered the faults of each vessel.

EVER SMART

The Court was critical of the EVER SMART for failing to stay on the starboard side of the channel, in compliance with the 'narrow channel' rule. For the 10 minutes prior to the collision, the vessel was to port of the mid channel. This failure to comply with Rule 9, meant that the vessels would not pass port to port.

The master's question "*what's that?*" was evidence of a failure to keep ALEXANDRA 1 under observation and, as such, a breach of Rule 5. Had the master kept a good visual lookout he would have seen not only the green side light of ALEXANDRA 1 but also the orientation of the masthead lights which would have indicated that from about 4 minutes prior to the collision that ALEXANDRA 1 was not set to pass port to port but was heading across his path .

The Elder Brethren of Trinity House who assist the Admiralty Court in seamanship and navigational issues advised that "*..EVER SMART's master should have acquired, as an ARPA target, ALEXANDRA 1, as soon as it had been detected on radar, 5 miles before the departure position of the pilot. Had he acquired ALEXANDRA 1 as an ARPA target he would have been alerted to the risk of collision. Thus there was a breach of Rule 5 "so as to make a full appraisal of the situation and of the risk of collision".. .*

The increase speed from 20 to 21 knots by the EVER SMART from 5 minutes to 3 minutes before the collision was also criticised by the Elder Brethren advised who considered that it was not good seamanship as it should only have been ordered once "*..the vessel was clear of the narrow channel, the pilot boarding area and any concentrated traffic..."* The causative potency of her excessive speed with regard to the damage which in fact occurred was substantial.

Finally EVER SMART failed to take avoiding action in good time, in accordance of Rule 8. This, together with the excessive speed was caused by the failure to keep a good lookout.

ALEXANDRA 1

The Court considered that, subject to a good aural and visual lookout, it would have been reasonable and good seamanship for the master of Alexander 1 to have approached the first pair of buoys keeping close to her own side of the entrance channel. Keeping a certain distance from the channel while another vessel is in the channel is not required in order to achieve a safe port to port passing.

Although EVER SMART was not acquired as an ARPA target, the Court did not find that causative of the collision, given the evidence suggested that the master was aware of EVER SMART's progress down the channel. However, the Court did find that the aural lookout was both defective and causative.

The master misheard or misunderstood the VHF conversation between VTSO and ZAKHEER BRAVO and believed it was a conversation between VTSO and EVER SMART. This error led him, to think that EVER SMART had been instructed to pass astern of ALEXANDRA 1. It is likely that the master was not listening carefully to the VHF. It was his duty to listen carefully because the conversation concerned his vessel ("the big tanker waiting there"). Even if his mishearing or misunderstanding could be explained by the noise of other conversations the master, having heard a message which made no sense to him (because it gave rise to a risk of collision), he ought to have checked whether his understanding was correct, either by contacting VTSO or EVER SMART.

The misinterpretation of the VHF conversation resulted in ALEXANDRA 1 crossing the approaches of the channel to give room to allow EVER SMART to turn to port and pass astern. Upon noticing that EVER SMART was not going to turn to port, the ALEXANDRA 1's engines were ordered 'full astern.' This caused the heading to turn to starboard, although at the time of the collision, the vessel was still heading across the entrance of the channel.

It was argued that the fault was not causative because ALEXANDRA 1 was not "blocking" the exit to the channel and there was ample room for EVER SMART to avoid the collision by turning to starboard. The submission that it was not causative seeks to resurrect the "last opportunity" rule which is not a proper guide to causation.

The Court did not consider the non functioning AIS to be causative of the collision, as they considered it unlikely that those on board EVER SMART would have noticed any alert or alarm since they were not keeping a good radar lookout and had not captured ALEXANDRA 1 as an ARPA target.

The Apportionment of blame between the two ships

As the EVER SMART was on the portside of the channel, the Court found that EVER SMART was in breach of the narrow channel rule. In addition the EVER SMART had failed to maintain a proper lookout - the conduct of ALEXANDRA 1 in heading across the approaches to the channel was probably unexpected and unpredictable, but ought to have been observed by EVER SMART at least four minutes prior to the collision. As a result of Ever Smart's poor lookout, it proceeded at an unsafe speed and failed to take avoiding action. In terms of culpability all these faults were very serious.

While the Court considered that ALEXANDRA 1 kept a good visual lookout, its aural lookout was

poor. The misinterpretation and failure to check the perceived content of VHF communications were also culpable.

Although each vessel was guilty of a poor lookout, the Court found that the fault of EVER SMART in this respect was much greater than that of ALEXANDRA 1.

Having already established that the crossing rule did not apply when a vessel was approaching the entrance to a narrow channel, the EVER SMART was also in breach of Rule 9 by being to port of the mid channel. The failure of the of the ALEXANDRA 1 to alter course to starboard and head towards the starboard side of the approaches of the channel was not considered a breach of Rule 9, but rather a consequence of failing to maintain a proper (aural) lookout and was found not to increase the risk of collision.

The unsafe speed of EVER SMART was also found to contributed more to the damage resulting from the collision than the very much lower and safer speed of ALEXANDRA

The Court found that the EVER SMART was 80% to blame and the ALEXANDRA 1 20%.