

Deadly collision in Singapore waters

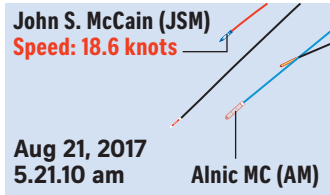
Six months after a US warship and an oil tanker collided in Singapore waters in August, killing 10 US sailors, Singapore's Transport Safety Investigation Bureau has released its investigation report, piecing together the final moments before the accident between the USS John S. McCain and Alnic MC occurred.

COLLISION AREA



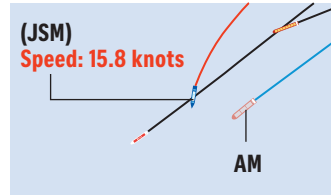
Collision
 Latitude: 0124.158
 Longitude: 104° 26.326'E

INCIDENT TIMELINE



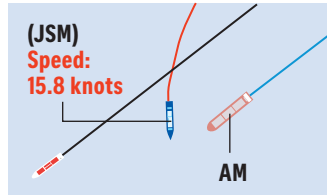
- The captain of Alnic, which is travelling at 9.5 nautical miles an hour, notices the US warship, travelling at the speed of 20 knots. Around 5.20am, he tries to call the US vessel but it does not respond. Meanwhile, instead of one crew member managing both speed and steering, the US commanding officer orders another crew to manage speed.

Aug 21, 2017, 5.23.12 am



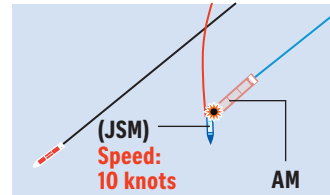
- Inadvertently, along with speed, the steering operations on the US warship also get transferred to the other crew member. The man originally in charge of steering reports loss of steering. Alternative steering is initiated. Speed is reduced. The throttles on each side of the ship are not coupled and the left side slows down more than the right and the US warship suddenly veers left, in the path of Alnic.

Aug 21, 2017, 5.23.35 am



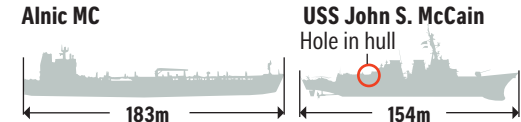
- Fearing a collision, the captain of Alnic reduces speed, which he thinks is better than changing direction to avoid a collision. He does not immediately try to stop his vessel, which would have bought him more time. The engine telegraph moves to "stop" only 40 seconds after the collision.

Aug 21, 2017, 5.23.59 am



- After the two ships collide, the Alnic continues to move at about 10 knots and pushes the McCain which had briefly scrapped along one side of the oil tanker. Both vessels then separate and stop.

HOW THE SHIPS COMPARE



| | Alnic MC | USS John S. McCain |
|------------|---------------------------------------|-------------------------------|
| Length | 183m | 154m |
| Width | 32.2m | 20m |
| Weight | 30,040 tonnes | 9,000 tonnes |
| Ship type | Chemical/oil tanker | Arleigh Burke-class destroyer |
| Built in | 2008 | 1991 |
| Belongs to | Stealth Maritime Corporation (Greece) | US Navy |

Sources: MINISTRY OF TRANSPORT, US NAVY STRAITS TIMES GRAPHICS