

Shen Neng 1 Media Conference Talking Points

Today the ATSB is releasing a preliminary factual report on the grounding of *Shen Neng 1* at Douglas Shoal at 1705 on 3 April 2010.

These are the facts as known to date by the ATSB and it should be stressed that this is preliminary report only and that this investigation is in its very earliest stages.

The ship had departed Gladstone that morning at 1054 with a full load of coal bound for China. On board were also 977 tonnes of heavy fuel oil, more than half of which was stored in double bottom fuel tanks (at the bottom of the ship).

The master's intention was to navigate the ship through the Great Barrier Reef via the commonly used passage to the north of North Reef Lighthouse.

Refer to Chart Aus 426

In the time leading up to the grounding there were a number of critical events:

At about 1330 the second mate and master decided to alter the ship's planned route slightly.

Refer to Chart Aus 819

Note that Douglas Shoal is not shown on this Chart

In the process of changing the planned route, the crew did not alter the "off-track" or course alteration "waypoint" alarms set in the ship's Global Positioning System (GPS) receiver unit. These navigational safeguards remained set for the original course.

At 1530 the second mate altered course to the new planned route. Shortly thereafter he received an "off-track" alarm on the GPS and "accepted" this alarm. (Remember that this alarm was still set up for the original route.)

At 1600 the second mate handed over the watch to the first mate. During this process the change of the planned route was discussed as was the fact that the GPS had not been programmed with the new course alteration

waypoint. The first mate was now alone in the wheelhouse with an able-bodied seaman acting as look out.

It was the first mate's first time navigating through this area.

The first mate had had a very busy time while the ship was in Gladstone loading and he had had only 2.5 hours of broken sleep in the previous 37 hours.

Shortly after 1600, the ship moved into the area covered by chart Aus 820, however the first mate did not change the charts on the chart table, nor did he establish the ship's distance from the next course alteration point.

Refer to chart Aus 820

At approximately 1630, about when the ship reached the course alteration point, the chief engineer visited the ship's bridge for five minutes or so to check the main engine revs. The first mate had intended to fix the ship's position at this time but now decided he would do so at 1700.

At 1700 the first mate took the ship's position coordinates from the GPS to plot its position. It was at this stage that he took out chart Aus 820 from the chart drawer. At this time he realised that the ship was past the amended alteration point and was very close to Douglas Shoal.

He attempted to alter course at the last minute but this action was too late and shortly thereafter the ship grounded at a speed of about 12 knots.

The grounding caused extensive damage to the ship's hull including to the double bottom ballast and fuel tanks.

In essence, a simple succession of errors on the part of a very tired crew member had resulted in the grounding.

ATSB's investigation is focusing on:

- *Shen Neng 1's* bridge resource management practices including passage planning, watch-keeping and passage monitoring.
- The ship and its management company's safety management systems in general with respect to guidance that could have prevented the grounding.

- **The ship and its management company's fatigue management systems, including work/rest schedules and practices on board.**
- **Human factors issues including fatigue, distractions and situational awareness.**
- **Existing protective measures in the Great Barrier Reef, including the coastal vessel traffic service, coastal pilotage and ship routing guidelines and recommendations.**
- **Initial incident response on board the ship, control and monitoring from ashore and salvage efforts.**

Our role is to have a very close look at the whole system of safeguards which allowed this accident to occur and to identify ways the system can be improved to prevent it happening again.