

SYNOPSIS



This incident was reported to the MAIB by the vessel's owner, Conoco Shipping, on 20 December 2000.

Randgrid arrived in the area of the Tetney monobuoy at 0055 on 20 December 2000, where she was met by the service boat *Spurn Haven*, and the tug *Lady Debbie*. Two Conoco berthing masters and two SGS cargo inspectors boarded while *Lady Debbie* was secured astern. With the pilot on board, and in south-east winds of 30 knots and seas 1.5 to 2.0m, the vessel proceeded to her berth using her dynamic positioning system (DPS) during the final stages of approach to the buoy. Despite the difficult working conditions, berthing was carried out safely, and *Randgrid* was secured at 0135.

Both berthing masters confirmed that the chain stopper was fully closed on to the chain before arranging for the messenger rope to be slacked back as usual.

The chief officer discussed the discharge with the cargo surveyors and went to supervise the pump and line set-up. The first discharge hose was connected at 0210, and discharge started at 0245 with a line pressure of 11 bar. A small leak caused a delay, but by 0350 the discharge pressure was back to 11 bar. At that time the bridge berthing master became concerned about the vessel's movements under wind and tide, so arranged for the steering control to be changed from DP to manual. The chain stopper was also checked. Between about 0415 and 0430, the chief officer went to the bridge and shut down the hydraulic pumps controlling the power systems forward. Before going to his cabin, he told the duty AB to check the mooring at regular intervals. This was carried out between 0500 and 0730; the mooring being confirmed secure. By 0715, with the flood tide due, the berthing master arranged for the tug astern to maintain a slow astern speed.

At 0753, the aft discharge hose pulled away. The duty cargo officer stopped the pumps and started to close the valves. Shortly afterwards, the forward hoses broke away. On the bridge, the berthing master became aware that something was wrong with the mooring, looked up, and saw the first of the hoses pulling free. Tetney Terminal was informed, and the standard terminal emergency arrangements were implemented. The astern tug was brought into play while *Randgrid's* main engines were started, and by 0812 the vessel was able to manoeuvre under her own power. *Randgrid* then went to an anchorage, while terminal vessels contained and dealt with the oil spillage.

An investigation revealed that both spool pieces and flanges were damaged on the hoses, with slight deformation and cracking in weld flanges. The chain stopper was found in the closed position, but the chafing chain was missing. Subsequently, it was established that the chafing chain had been released from the chain stopper because the chain stopper controls had been operated accidentally. The pickup rope held the

vessel until the lashing, securing the chafing chain to the pickup rope, failed at about 0750.

No staff were injured, but an estimated oil spill of about 12 tonnes occurred.

This report recommends that the owner changes the design of the chain stopper control and alarm system, as well as bridge management procedures.

Photograph courtesy of Conoco



Randgrid