## **SYNOPSIS**

(All times are UTC +1)



At about 0210 on 13 April 2005, the UK registered tug *Thorngarth* was assisting the Liberian registered chemical tanker *Stolt Aspiration* and acting as bow tug. The two vessels collided when *Thorngarth* was attempting to recover her position ahead of *Stolt Aspiration*.

As a consequence of the impact, *Thorngarth* was holed below the waterline and sustained significant structural damage. The tug's engineer also suffered a broken arm. *Stolt Aspiration* suffered only minor damage to its bow. There were no other injuries or pollution.

Stolt Aspiration was approaching Alfred Lock, the entrance to the Birkenhead Docks on the River Mersey. To assist in passing through the locks, the services of two tugs were utilised, and a pilot was on board the tanker. The tug *Thorngarth* was to act as the bow tug, with the tug *Ashgarth* assisting aft. The weather was overcast with rain showers, but at the time of the accident, visibility was moderate, with light winds. It was still dark.

Both tugs were designed to tow over the bow, and the standard approach for the bow tug is to meet the ship 'bow-to-bow'. The tug passes her gear up to the ship's forecastle, and then quickly reverses away from the bow of the ship to take the weight of the towing gear. It thus tows stern-first. This is not an unusual manoeuvre and is performed by many tugs around the world.

While carrying out this manoeuvre, *Thorngarth* initially correctly positioned herself right ahead of *Stolt Aspiration*, and passed her messenger line up to the forward mooring party. The tug then started to move away from the ship, but began to turn slightly to one side. The turning effect was countered and the tug closed the port bow of the ship. Position ahead of the ship was regained by increasing engine power. Once ahead of the ship again, the tug started to turn once more. This again was countered, but this time the tug approached the starboard bow of the ship. In recovering from this position and move ahead of the ship, the tug ended up across the bow of *Stolt Aspiration*, which then struck *Thorngarth* on its starboard side.

Thorngarth crossed the Mersey to berth at the Princes Landing Stage to assess the damage and land the engineer to an ambulance. Having taken advice from the VTS operators, and in consultation with the company managers, they berthed at the Kings Dock River Wall in order to dry out the vessel as the tide dropped, inspect the damage and carry out temporary repairs.

Stolt Aspiration continued to enter Birkenhead Docks, with the assistance of only one tug, without further incident. External and internal inspections were made of the tanker's bow spaces, and only minor damage was found.

The accident was caused by the tug master's lack of familiarity with the tug, and the lack of training in the particular manoeuvre he was required to perform. This was one of a number of similar incidents involving tugs in a period of 4 months. All were attributable to the lack of training and familiarisation of the tug master with the tug, and the particular task required of him. This prompted the MAIB to issue Safety Bulletin 02/2005 (Annex A), highlighting the need for an assessment of the "tug to task" allocation before each towing operation, and ensuring that tug masters are fully trained.

A recommendation has been made to major tug operators, the British Tugowners Association (BTA), and the PMSC (Port Marine Safety Code) steering group. The recommendation is aimed at encouraging discussion between all parties when deciding the optimum allocation of tugs for all manoeuvres within a port, and the level of crew experience required for each task. A further recommendation has been made to the BTA to encourage its members to ensure that the movement of personnel between tugs is closely monitored, and that training and expertise of tugs' crews is matched, and is consistent with the type of tug and its expected task requirement.