## Hung Up On Me

## Narrative

A family of three were looking forward to a late summer holiday on a narrowboat on the North of England canal network. It was their first boating holiday and they had hired a 20m long boat for a 3-day trip.

The first day was enjoyable as the family motored their way slowly upriver and negotiated three locks successfully before mooring up for the night. Early the following morning, the family decided to go back down the canal. They passed through the first lock uneventfully and a short while later entered the second lock. They opened the paddles (sluices) of the down gate to lower the water level (Figure 1), and as the water level in the lock reduced, the boat drifted towards the up gate. Soon the cill<sup>1</sup> was exposed and the stern of the boat came to rest on it (Figure 2).

<sup>&</sup>lt;sup>1</sup> Cill - a structure that is underwater when the lock is full, supports the lock gates and protrudes 2.5m into the lock chamber.



Figure 1: Diagram of a typical lock arrangement showing the cill





Figure 2: Hire boat's stern resting on the cill

As the lock emptied further, the boat's bow began to submerge with its stern still lodged firmly on the cill. A member of the family, who was tending to the mooring ropes on the canal bank, quickly closed the paddles of the down gate on the lock. However, by that time the forward section was fully immersed (Figure 3). The family informed the boat hire company immediately and they were rescued from the boat shortly afterwards. A company that specialised in recovering 'cilled' boats attended the scene and completed the salvage of the boat over the next 4 hours.

## **CASE 23**



Figure 3: Hire boat's bow fully immersed

## The Lessons

- 1. When using locks, be aware of the extent of the cill and look out for cill marks, which are usually painted on the lock walls. By keeping the boat in the middle of the lock and not going too close to the lock gates you can avoid becoming 'hung up' on a cill.
- 2. When locks are being emptied or filled, water moves in or out, and this can generate turbulence and cause your boat to move about. Ensure that the boat maintains a steady position in the lock and let water in or out gradually by controlling the paddles.
- 3. Most canal networks and locks were built more than two centuries ago and date back to the industrial revolution. The locks, their gates and paddles are not of standard construction and sometimes vary widely from one lock to the next. Plan your journey well and get a good understanding of the canals and locks that you intend to use.
- 4. Take extra care when you are using one of the longer boats as the clearance at either end of the lock may be limited to less than half a metre.