

SYNOPSIS

On 1 September 1999 at 1718, the Solent Coastguard notified the Marine Accident Investigation Branch (MAIB) that the engine room of the cargo ship *Sonia* had flooded. Initially the situation was monitored, and the following day an MAIB inspector started an investigation.

Sonia was a 1968 built, 4,659gt, four hold, single screw general cargo vessel, with a crew of 15. She was registered in St Vincent and The Grenadines, and operated worldwide by the managers, Balthellas Chartering SA. She arrived alongside No 47 berth in Southampton docks on 27 August and started loading a bulk cargo of grain later that day. Loading was completed by 1955 on 31 August, and at 2240 the pilot boarded and *Sonia* left Southampton for Greece.

At about 0220 on 1 September, water was discovered flooding into the engine room from a hole beneath one of the main seawater inlet valves. At this time the vessel was about 6 miles south-east of Saint Catherine's Point, Isle of Wight. After an inspection by the chief engineer, and discussions with the master, she turned back and anchored in Sandown Bay to carry out repairs. Early attempts by the crew to use a collision mat to seal the inlet to the sea chest were unsuccessful, and the engine room continued to flood. At 1514, the coastguard became aware of the incident and the serious nature of the flooding. The emergency services were alerted and the condition of the vessel monitored. At 1600, the water level in the engine room caused all main electrical power to be lost.

Over the next few hours, both Portsmouth and Southampton port officials, together with the coastguards, attempted to assist the vessel. With the ship's operators initially reluctant to seek official help, the Maritime and Coastguard Agency (MCA) instigated the Intervention Powers in an effort to force the issue while the appointment of salvors remained under discussion. This resulted in an early appointment of salvors, with technical assistance and equipment being used. Once the water ingress had stabilised and the water level reduced to below the floor plates, the vessel was towed back to her berth in Southampton. There, a seal plate was welded in place and the remaining water pumped out of the engine room.

The cause of the water ingress was a corroded seawater pipe connecting the sea chest to a system isolating valve. This 7mm thick pipe wall had suffered galvanic corrosion adjacent to the isolating valve flange over two-thirds of the pipe circumference. This level of corrosion reflected some years of neglect and suggested that the required inspections and surveys on a 31 year old vessel were not as thorough as they should have been. Given her age and the extent of the water damage in the engine room, *Sonia* was subsequently scrapped.

There were no injuries to sea staff but the MoD salvage master suffered shock after falling into the sea.

Recommendations regarding updating and supplying information and technical guidance are made to the MCA, the ship's owners and The International Association of Classification Societies (IACS).