

SAFETY FLYER TO THE SHIPPING INDUSTRY

Loss of propulsion control identified following the collision between the fishing vessel *Kirkella* and harbour tug *Shovette* at King George Dock, Hull, England on 24 June 2022

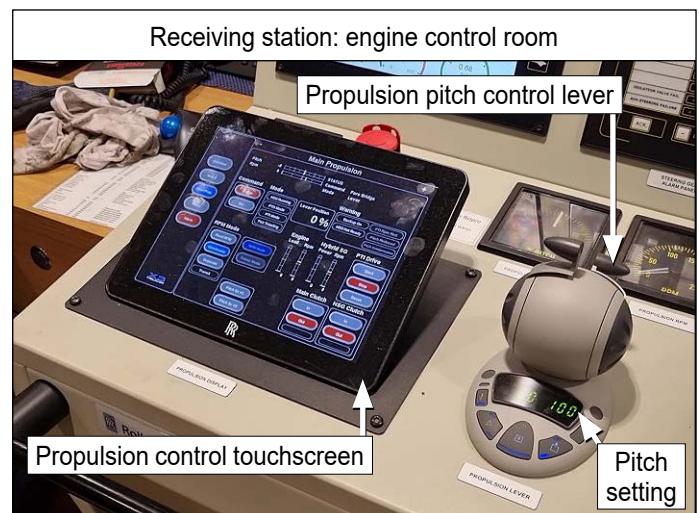
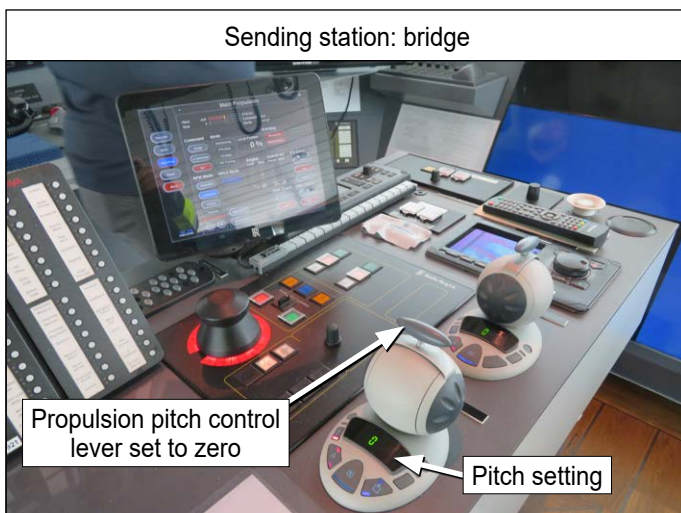
Narrative

On 24 June 2022, the UK registered fishing vessel *Kirkella* lost control of its propulsion system while berthing and collided with the harbour tug *Shovette* in King George Dock, Hull, England. *Kirkella*'s bulbous bow breached *Shovette*'s hull and starboard fuel tank during the collision, causing the tug to partially sink and resulting in approximately 7,000 litres of marine diesel oil spilling into the dock. *Kirkella* was not damaged during the accident.



Kirkella and *Shovette*

Kirkella's propulsion system comprised a single main engine driving a controllable pitch propeller via a clutch and gearbox. The vessel's propulsion was controlled by a Rolls-Royce Helicon-X3 integrated propulsion control system, supported by Kongsberg Maritime. The propulsion system could be operated from several stations located in the wheelhouse and from the engine control room (ECR). The loss of control occurred when the propulsion control was passed from the bridge to the ECR with the clutch engaged. At the time of the handover, the bridge propeller pitch lever was set at zero, while the ECR's propeller pitch lever was set at 100% ahead (see figure). The propeller pitch automatically advanced when control was accepted in the ECR, causing *Kirkella* to move forward on the berth.



The status of *Kirkella*'s propulsion control system at handover of control

Safety lessons

1. The propulsion control system on *Kirkella* was not fitted with interlocks to prevent a mismatched propeller pitch lever position when control was transferred. Over 4,000 Rolls-Royce Helicon-X3 systems have been supplied to the industry, most of which were not fitted with optional interlocks, which were not required. Retrofitting can be undertaken by Kongsberg Maritime, as customer support provider.
2. Robust shipboard practices are essential to maintain propulsion control during handover, regardless of whether system interlocks are fitted. Documented procedures should contain a requirement for the operator of the sending station and the receiving station to check that propulsion systems pitch settings are aligned at the time of transfer.
3. To reduce the risk of propulsion thrust being applied inadvertently while alongside it is advisable to declutch engines before transfer of control.

This flyer and the MAIB's investigation report are posted on our website: www.gov.uk/maib

For all enquiries:
Marine Accident Investigation Branch
First Floor, Spring Place
105 Commercial Road
Southampton
SO15 1GH

Email: maib@dft.gov.uk
Tel: +44 (0)23 8039 5500

Publication date: June 2024

Extract from The United Kingdom Merchant Shipping (Accident Reporting and Investigation) Regulations 2012 – Regulation 5:

“The sole objective of the investigation of an accident under the Merchant Shipping (Accident Reporting and Investigation) Regulations 2012 shall be the prevention of future accidents through the ascertainment of its causes and circumstances. It shall not be the purpose of an such investigation to determine liability nor, except so far as is necessary to achieve its objective, to apportion blame.”

NOTE

This safety flyer is not written with litigation in mind and, pursuant to Regulation 14(14) of the Merchant Shipping (Accident Reporting and Investigation) Regulations 2012, shall be inadmissible in any judicial proceedings whose purpose, or one of whose purposes is to attribute or apportion liability or blame.

© Crown copyright, 2024

You may re-use this document/publication (not including departmental or agency logos) free of charge in any format or medium. You must re-use it accurately and not in a misleading context. The material must be acknowledged as Crown copyright and you must give the title of the source publication. Where we have identified any third party copyright material you will need to obtain permission from the copyright holders concerned.