



COMITÉ MARITIME INTERNATIONAL

WORKSHOP ON AUTONOMOUS SHIPS, CYBERCRIME & MARINE INSURANCE LONDON, NOVEMBER 2018

THE CONVERGENCE OF MODERN TECHNOLOGY, CYBERCRIME AND MARINE INSURANCE

“Crossing vessel approaching off the port bow” the Second Mate tells the captain as he comes onto the bridge. “We’re Stand-On, but she’s coming in fast” says the Master. He looks worried. He grabs the VHF:

*“This is UK registered container vessel MANDSHIP. Calling unidentified vessel approaching my port bow on a heading approx 315°. My course is 045°, speed 16 knots. **You are Give-Way vessel.** I repeat: **You are Give-Way Vessel.** Please alter course and speed immediately.”*

There is no reaction.



The master tries again: *“Vessel now approaching close quarters situation with my vessel. I remain Stand-on Vessel. You are Give-Way vessel. **Please alter course and speed immediately to avoid collision**”*

Still no reaction whatever.

But now the Master can see the other ship more clearly.

“No-one on her bridge, Cap’n” says the Second Officer. “Aye, and none on deck either. Looks like the *Mary Deare* - not a soul in sight. Maybe she’s one of those drive themselves Google ships - Quartermaster, helm to manual and ready for emergency stations”.

... Still the mystery vessel keeps coming ... without course or speed change.

With a collision imminent, the Master tells the Second Mate “No avoiding it now, we’ll have to try to turn into her and slip past starboard to her starboard side. It’s the only way we’re going to avoid a head-on.” He then orders hard a-port, full ahead and sounds one long blast on the horn. He reckons that with enough speed he has seaspace to clear inside of the other vessel – which is obviously not going to give way. Responding to the Second’s obvious concern, he assures her “The COLREGS allow departures for extreme calls like this one.”

But the Master watches in horror as the helm fails to respond: his own ship maintains course and speed. Then a message suddenly flashes up on all the bridge computer screens:



The Give Way vessel is the AUTOSHIP. The Master was right: she is unmanned. She collides heavily with the MANDSHIP's port side, amidships.

Deafeningly, the two vessels scrape down each other's sides. The anchor in the hawsepipe of the AUTOSHIP gouges deep into the fo'c'sle of the MANDSHIP and rips out part of her bosun's store before the two ships clear.

The mystery vessel continues, speed unabated and course unchanged, until she slows, with systems in limp mode.



The MANDSHIP is badly damaged and requires salvage into a port of refuge, where her owners declare GA. The bosun and an AB require hospitalisation for serious injury. Temporary and then permanent repairs run to many millions of dollars. Her current voyage and two future charterparty fixtures are cancelled, cargo is discharged in the port of refuge, and her entire crew is finally repatriated from the port where permanent repairs are carried out.

The AUTOSHIP is boarded by the Spanish Coast guard and a salvage crew who regain control of her and take her into a safe place in which to tranship her cargo.

Meanwhile, off the east coast of Scotland ...

A products tanker is on passage from Peterhead south to Aberdeen. She is fully laden with gasoline. Without warning, the duty officer notices the vessel appears to be veering off her autopilot course – to starboard, in the direction of land. The officer calls the Master to the bridge. “Not sure what's up, Cap” the officer remarks “We seem to be heading off the course you set us for the Aberdeen roads. I'm trying to correct but the helm is becoming increasingly sluggish.”

“Steer two points to port” the Master orders. But the helm becomes completely unresponsive and the ship now seems to be heading inexorably for the shore – with a mind of her own.

At that moment, the bridge screens go blank, then show a picture of a Black Hat, followed by the same notice that was flashed onto the screens of the MANDSHIP.

The tanker takes bottom just off Balmedie, on the pristine shoreline of a golf course. There she remains.