

FLYER TO FISHING VESSELS AND SMALL CRAFT
GU33 LADY HELEN – S: Engine Room Explosion, St Helier
17th June 2014



Figure 1: Fishing vessel Lady Helen- S

Narrative

On the morning of 17 June 2014, a junior crew member was tasked with cleaning the engine room as instructed by the skipper the previous day.

On arriving back at the vessel with the intention of moving the boat to load bait and fuel up, the skipper noticed that the crew member was washing down the engine room with CarPlan Brake Cleaner.

He immediately told him to stop what he was doing and to come up top with the intention of cleaning down with soapy water, after loading bait.

The engine room hatch was closed causing insufficient ventilation/gas freeing of the space. Due to residual vapour from the Brake Cleaner in the engine room space, an explosion occurred when the main engine was started due to a spark being generated in the contactor solenoid or motor brushes. Fortunately no liquid was left in the space to cause conflagration to accompany the explosion.

The explosion lifted the wheelhouse and accommodation floors, blew out the back of the wheelhouse and some of the windows, blew out a bulkhead hatch and blew the vivier hatch off its hatchway.

All of the crew managed to escape without serious injury, but all were shocked and left with their ears ringing. One crew member was taken to hospital with bruising after a hatch cover hit him in the chest.



Figure 2: CarPlan Brake Cleaner

Safety Lessons

1. The explosion occurred as a result of vapour from the cleaner igniting when the engine was started.
2. The safety Data Sheets for this product gives it UN No 1993, Hazard Class 3, Flammable Liquid, with it also being an environmentally Hazardous Substance / Toxic Marine Pollutant.
3. This product is totally unsuitable for use on a fishing vessel, particularly in the confined spaces of an engine room.
4. Safety Data Sheets and user instructions should be available for all products in use on board and careful consideration should be given for their appropriate use.
5. The ensuing explosion could have been avoided if the skipper had allowed adequate time for ventilating the engine space.
6. Unfortunately the young crew member took it upon himself to “use his initiative”.
7. Young or inexperienced crew members need to be supervised by an appropriately trained member of the crew.
8. Even the most mundane tasks, if not approached in the correct way can, either through inexperience or thoughtlessness, lead to potentially serious or fatal consequences.

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