

MAIB

MARINE ACCIDENT INVESTIGATION BRANCH

FLYER TO THE LARGE YACHT INDUSTRY *LADY CANDIDA*: total loss due to a fire caused by accumulated lint in a tumble dryer, 28 July 2007



Photograph courtesy of Marine Nationale

During the afternoon of 28 July 2007, the yacht *Lady Candida* was sailing approximately 3 nm off the coast of Southern Corsica. Six crew and 11 charter guests, including 4 young children, were on board. The yacht was on a north-westerly course cruising at 8 knots and the wind was force 6 from the west.

At around 1630, a smell of burning was reported to the crew. As the fire detection system had not activated, the crew dispersed around the vessel to investigate. When a deckhand saw smoke coming out of a forward vent, he opened an escape hatch on the forward deck and entered the laundry. The laundry was filled with thick black smoke and the deckhand saw that clothes inside a tumble dryer were on fire. He pulled the clothes from the dryer and then put out the flames using a portable extinguisher. The deckhand then returned to the deck through the open escape hatch.

However, the fire had already spread through the tumble dryer vent pipe and had ignited the laundry's false plywood ceiling. The crew were unable to start the main fire pump, and the emergency fire pump was not readily accessible. Despite the crew's efforts to fight the fire with portable extinguishers, it continued to spread and was soon out of control.

At 1640 the captain broadcast a "Mayday" and the charter guests were taken ashore by two of the crew in the vessel's tender. At 1645, the remaining crew abandoned the vessel in a liferaft and were rescued by another yacht in the vicinity. *Lady Candida* sank at 2121 when being towed by a local rescue craft.

Safety Issues for yacht managers and crews

1. The source of the fire was lint, which had accumulated in the tumble dryer and blocked its air outlet. This caused the dryer to operate for longer periods than normal. The resultant heat generated was sufficient to ignite the lint. **Lint is a highly combustible material and should never be allowed to accumulate in dryer outlets. Filters and ventilation ducts need to be cleaned regularly.**
2. It is likely that the fire detection system did not operate because the batteries fitted to the smoke sensors were either flat or had been removed. **Where fire detection systems are not compliant with SOLAS II-2/7 and sensors rely on a single source of power, extra vigilance has to be exercised to ensure that the power source is always available. Batteries should be checked regularly and systems should be tested at frequent intervals.**

3. Factors contributing to the spread of the fire were:
 - The crew were unable to start the main fire pump
 - The emergency pump was not used because it was not readily accessible
 - The escape hatch to the laundry space was left open
 - The vessel was not manoeuvred to minimise the air-flow over the deck
 - Only one of the crew (not the captain) had completed a basic fire-fighting course
 - Fire drills were not conducted

Ensuring that crews are properly trained and drills are regularly conducted is essential if the correct action is to be taken in a real emergency.

4. Prior to the abandonment by the crew, two of the vessel's liferafts were inaccessible due to the fire. **Positioning liferafts in different locations increases the chances of survival. In this case, had all the liferafts been stowed together, the outcome could have been far more serious.**
5. A number of deficiencies in the management of the vessel were identified. These included: the master's lack of fire-fighting training, the number of persons carried, the lack of an engineer, the lack of lifejackets for children, the lack of safety drills, the lack of knowledge of the vessel and her equipment, and overdue service on the vessel's liferafts. **The management of a yacht is not the sole responsibility of the captain. The owner should also take steps to ensure the captain is suitably qualified and experienced, and to ensure that appropriate management support and oversight are provided.**

Further details on the accident and the subsequent investigation can be found in the MAIB's investigation report, which is posted on its website:

www.maib.gov.uk

Alternatively, a copy of the report will be sent on request, free of charge.

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