July 1, 2025 MIR-25-27

Fire aboard Towing Vessel *Lucinda Smith*

On December 7, 2024, about 1115 local time, the towing vessel *Lucinda Smith* was moored alongside a dock on the Acushnet River in New Bedford, Massachusetts, when a fire started in one of the vessel's unoccupied staterooms (see figure 1 and figure 2).[1] The crew attempted to extinguish the fire but were unsuccessful and were forced to abandon the vessel onto the dock. Shortly afterward, the local fire department arrived and extinguished the fire. There were no injuries, and no pollution was reported. Damage to the vessel was estimated at $1.5 million.[2]

Figure 1. *Lucinda Smith* underway in 2022. (Source: Marinetraffic.com, Bill Black)

[1] In this report, all times are eastern standard time, and all miles are statute miles.

[2] Visit ntsb.gov to find additional information in the public docket for this NTSB investigation (case no. DCA25FM010).

Casualty Summary

Casualty type	Fire/Explosion
Location	Acushnet River, New Bedford, Massachusetts 41°38.52′ N, 070°55.28′ W
Date	December 7, 2024
Time	1115 eastern standard time (coordinated universal time –5 hrs)
Persons on board	1
Injuries	None
Property damage	$1.5 million est.
Environmental damage	None
Weather	Visibility 10 mi, clear, winds west 9 kts, air temperature 39°F, water temperature 48°F, morning twilight 0627, sunrise 0658
Waterway information	River; depth 23–25 ft

Figure 2. Area where the fire aboard the *Lucinda Smith* occurred, as indicated by a circled *X*. (Background source: Google Maps)

1 Factual Information

The 81-foot-long towing vessel *Lucinda Smith* was owned by Double Eagle Marine and operated by R B Our Equipment Leasing. The vessel had a valid US Coast Guard-issued certificate of inspection documenting compliance with Title 46 *Code of Federal Regulations* Subchapter M.

On December 7, 2024, the *Lucinda Smith* was moored alongside a dock on the west side of the Acushnet River, across from Popes Island in New Bedford, Massachusetts. The vessel had been at the dock since late August of that year, while it underwent replacement of the main engines. While at the dock, several crewmembers lived and worked aboard the vessel; the first mate had moved his personal belongings into one of the vessel's staterooms (aft of the wheelhouse) on December 5, following the departure of another crewmember.

About 1055, the first mate entered the stateroom to retrieve his car keys. He did not notice anything out of the ordinary. After retrieving his car keys, the first mate shut the stateroom door and left.

About 1115, the vessel's engineer was in the engine room changing potable water filters when he heard a smoke alarm going off. Independent smoke alarms were located in the galley, passageways, crew staterooms, and the bridge; the engineer was unsure which smoke alarm he heard first.

The engineer observed smoke coming from under the door and through the vents of the first mate's stateroom. He stated that when he opened the door to the stateroom to investigate, the fire "flashed over" and intensified. Using his cell phone, the engineer called the operating company's operations manager to report the fire. The operations manager called the mate and other crewmembers, who were on the dock, to inform them of the fire. A crewmember called 911 to report the fire.

The engineer then retrieved a nearby handheld extinguisher and attempted to fight the fire. The first mate and others from the dock joined the engineer in attempting to fight the fire with handheld fire extinguishers. However, they were quickly overwhelmed by "a lot of smoke and a lot of heat … [stuff] was falling down from the overhead," and they were forced to evacuate the vessel to the dock.

About 1130, the New Bedford Fire Department arrived on scene. Firefighters boarded the vessel with fire hoses and fought the fire, which had spread into other accommodation spaces and the wheelhouse (see figure 3). They declared the fire extinguished several hours later.

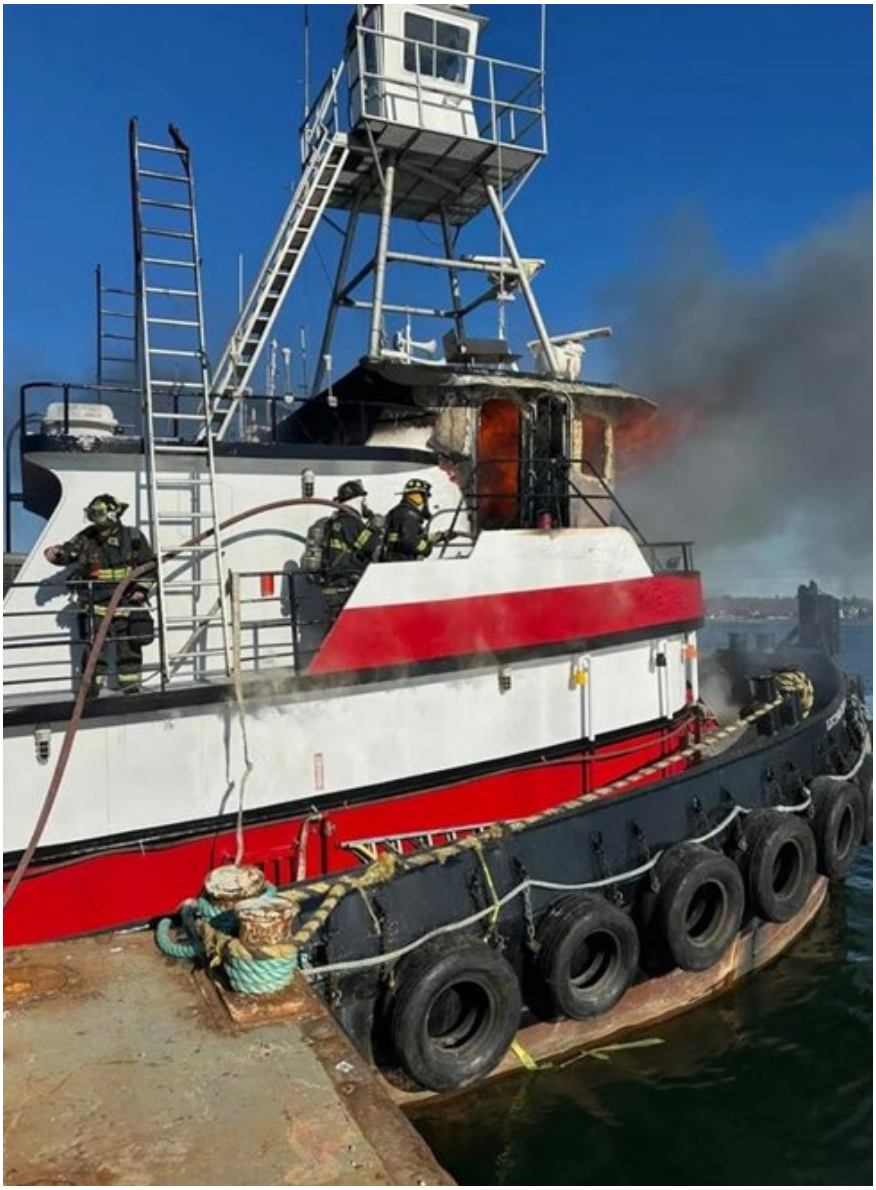

Figure 3. Land-based firefighters on *Lucinda Smith*. (Source: New Bedford Fire Department)

After the fire, US Coast Guard investigators examined the damage on the *Lucinda Smith*. The Coast Guard also requested assistance from Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF) certified fire investigators, who participated in the examination of the damage. ATF investigators concluded that the fire originated in the first mate's stateroom. Based on the fire damage patterns found within the stateroom, investigators concluded that the fire most likely originated at or near the floor (deck) by the end of the bunk. However, due to the damage to the interior of the stateroom, ATF investigators could not determine the exact ignition source and ultimately classified the cause of the fire as "undetermined."

According to the first mate, the stateroom had an electrical wall receptacle on the bulkhead near one end of the bunk, and the only thing that was possibly plugged into it on the day of the fire was a cell phone charger (not attached to a cell phone), but he could not remember for sure (see figure 4). There was also a built-in heater and oscillating fan in the room, but the first mate told investigators they were not typically used. According to the operations manager of the vessel, all the wiring on board the vessel was original, and all the accommodation's interior framing, partitions, and paneling were wood.

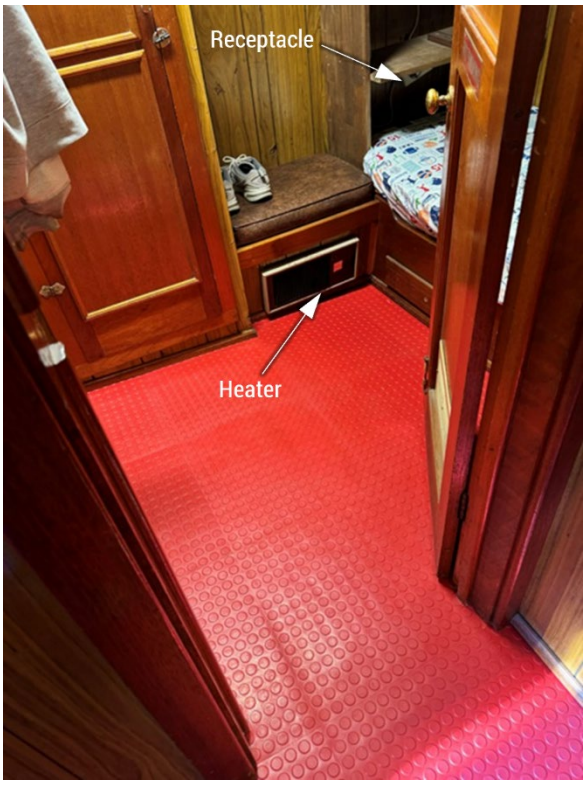

Figure 4. First mate's stateroom, with partial view of the bunk, on unknown date before the fire. (Source: R B Our Equipment Leasing)

2 Analysis

While the towing vessel *Lucinda Smith* was moored at the dock, a crewmember heard a smoke alarm and discovered a fire in one of the staterooms.

ATF investigators determined that the fire originated in the first mate's stateroom, aft of the wheelhouse, near the end of the bunk (by the electric heater). Electrical sources near the bunk included an electric heater, an oscillating fan, and an electrical wall receptacle. Crew interviews revealed that the heater and fan were not in use before the fire and thus likely were not an ignition source. The receptacle and associated vessel wiring were original to the vessel's construction and nearly 50 years old. If there was an electrical fault—such as a loose, broken, or frayed wire, or broken receptacle hardware—within the receptacle or nearby circuitry, it could have created excessive resistance heating. Resistive heating from electrical conductors within receptacles can produce sufficient heat to ignite nearby combustibles. However, due to the extent of the fire damage, the exact ignition source and cause of the fire could not be determined.

Once an ignition source was produced, combustible materials—wood paneling and framing, insulating material, clothing, and bed linen—near the fire's origin (end of the bunk) caught fire. After these combustible materials caught fire, they provided a path for the fire to expand into the overhead and eventually the entire stateroom, other accommodation areas, and the wheelhouse.

3 Conclusions

3.1 Probable Cause

The National Transportation Safety Board determines that the probable cause of the fire aboard the towing vessel *Lucinda Smith* was an undetermined ignition source in one of the vessel's staterooms.

Vessel Particulars

Vessel	*Lucinda Smith*
Type	Towing/Barge (Towing vessel)
Owner/Operator	Double Eagle Marine/R B Our Equipment Leasing (Commercial)
Flag	United States
Port of registry	New Bedford, Massachusetts
Year built	1975
Official number	569814 (US)
IMO number	8333166
Classification society	N/A
Length (overall)	81.4 ft (24.8 m)
Breadth (max.)	28.0 ft (8.5 m)
Draft (casualty)	7.0 ft (2.1 m)
Tonnage	125 GRT
Engine power; manufacturer	2 x 1,300 hp (969 kW);Cummins QSK38-M diesel engines

NTSB investigators worked closely with our counterparts from **Coast Guard Sector Southeastern New England** throughout this investigation.