

# Accident Report

*Bounty*

Fire & Subsequent Loss

7 May 2006

Class B



# NARRATIVE

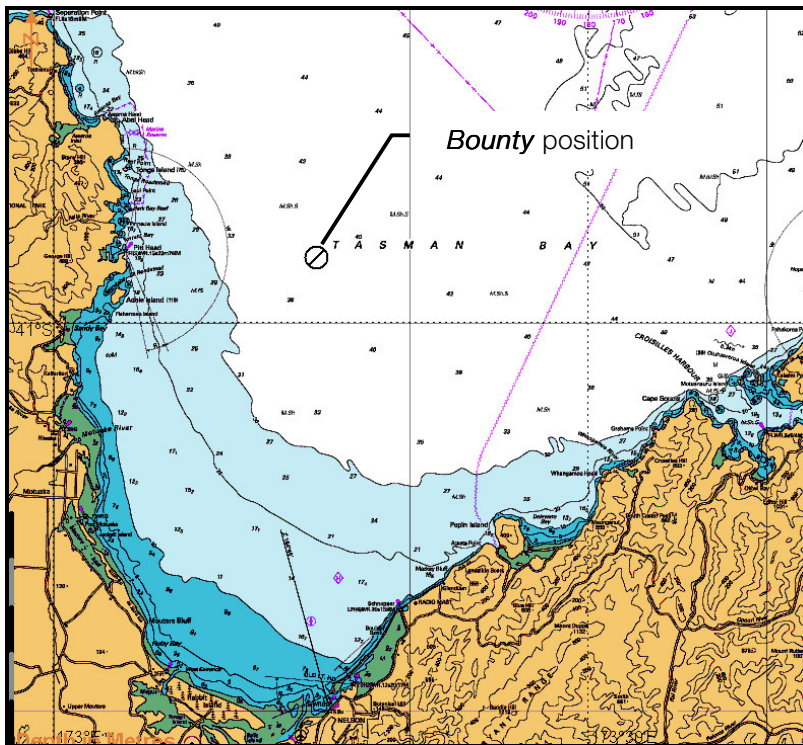


Figure 1

At 0630 hours, on May 6 2006 the 15 metre offshore-restricted trawler **Bounty**, constructed of wood and built in 1967, departed Port Nelson for fishing grounds in Tasman Bay.

On board was the Skipper and two crew.

At about 0800 hours, they shot the trawl and commenced fishing for the day. They completed two trawls during the day and shot away for the third time at about 1700 hours. At this time the Skipper went below into the engine room (ER) to check all was okay and to deactivate the hydraulics.

At about 1830 hours, the Skipper and one crewmember had gone to bed leaving the second crewmember on watch while they trawled.

At approximately 2000 hours, the crew on watch smelt smoke and noticed 'hazing' in the wheelhouse. He immediately woke the Skipper. They both saw smoke in the wheelhouse. The Skipper lifted up the hatch into the ER and saw flames licking across the deckhead below. He shut the hatch and then saw flames through a crack in the bulkhead at the back of the wheelhouse bulkhead.

The crew then observed a large 'jet' of flame, about 3 to 4 metres high, coming out of the engine exhaust, located above the wheelhouse.

The Skipper grabbed three portable fire extinguishers and discharged them through a vent into the exhaust space at the back of the wheelhouse.

He told the crew to get the life raft off the monkey island and launch it. The Skipper then reduced engine revolutions back to idle and put the gearbox into neutral, hoping to reduce the heat in the exhaust area.

He attempted to uncoil the deck hose from its storage position, but after getting it partially freed, he realised that the water flow was very low due to the main engine running at idle revolutions.

He abandoned this idea and returned to the wheelhouse as the aft bulkhead became engulfed in flames.

At 2015 hours, he made a Mayday call on VHF channel 16, and reported his situation and position to Maritime Radio. Immediately after this call the aft wheelhouse windows started to crack with the heat from the fire and the Skipper was having difficulty seeing and breathing in the wheelhouse.

He and the crew abandoned the vessel and got into the life raft near the bow of the vessel. They attempted to paddle the raft around the bow and down to the stern of the vessel to see if they could achieve anything else. They had to abandon this idea as LPG bottles that were stored on the monkey island exploded. They paddled away from the vessel to a safe distance.

Another trawler in the area ***Vulcan Fisher***, heard the Mayday call and steamed for the reported position. They picked up the survivors about 45 minutes after the Mayday call was made.

They stood by unable to fight the fire because of the fierce blaze and heat as well as the frequent small explosions heard from the vessel.

***Bounty*** sank at about 1030 hours, on 7 May 2006 in position 40° 57.22 ' S and 173° 14.760' E (See *Figure 1*).

## FINDINGS

Interviews were conducted with the Skipper, the two crewmembers and the Owner, in an effort to determine the cause of the fire.

**Bounty** was declared an actual total loss as she had burnt down to the water line and had then sunk.

The vessel had a valid safe Ship Management Certificate with Survey Nelson Ltd. She was correctly manned at the time of the accident.

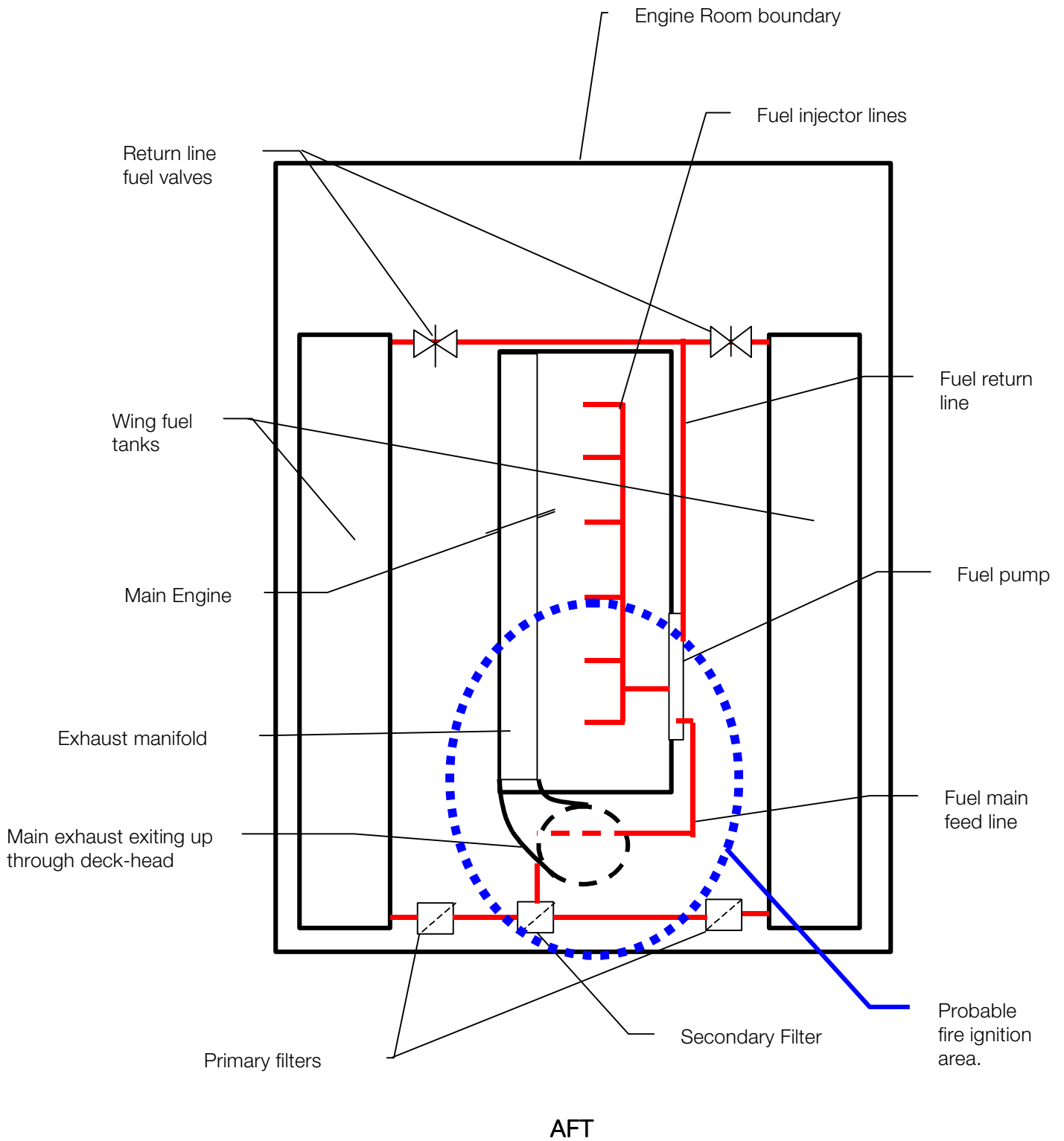
The Owner stated that all the fuel lines had been replaced by a fuel technician in January 2006 and that those not replaced were deemed by the hydraulic pipe repair technician to be in satisfactory condition. The flexible fuel lines that were replaced had some cracking on the outer cover only, they were not leaking. A copper fuel line was changed because it has sustained some distortion but was not leaking.

The Skipper said that the time from when he was alerted about the fire to when they all abandoned the vessel would have been no more than five minutes. Flames were seen continuously jetting from the exhaust above the wheelhouse for a considerable time. The aft section of the wheelhouse was quickly engulfed in flames making it impossible to reach the stern deck area of the vessel.

There was very little time to mount an organised and structured attack on the fire. Extinguishers with swage lock connections through bulkheads or engine box covers would enable the nozzle of an extinguisher to lock into a quick release connector. This would enable crew to fight a fire from outside an engine bay in smaller vessels such as **Bounty**.

One crewmember stated that he had been able to get into the ER in the very early stages of the fire but he was not able to see much due to the amount of smoke at that time. He did however observe some sparking or flame activity along the aft bulkhead of the ER. This is where the main fuel lines from each wing tank 'T' into a primary filter and then onto the main engine fuel system.

FORWARD



The main engine could not be shut off from a remote station in the wheelhouse. Instead a governor lever had to be depressed in the ER on the main engine. There was no remote shut off for the fuel tanks.

A remote shut for the main engine would have reduced the amount of pressurised fuel that was feeding the fire. Shutting down the main engine, however, which in this case was the primary provider of 230V electricity and the fire pump, could have severely hampered any effort to fight the fire had there been time to do so.

Smoke alarms or heat detectors in the engine room could have given more warning in this instance but are not required under current Maritime Rules for this class of vessel. Smoke alarms can be a hindrance in engine rooms due to some main engines giving off vapours and fumes during normal running.

## COMMENT & SAFETY RECOMMENDATIONS

1. This represents the third fire on under 24 metre vessels (where fixed fire fighting systems are not required to be fitted), where the crew have been unable to fight the fire from a position remote to the source of the fire. In this accident, and on another fishing vessel, the two vessels concerned foundered, fortunately without any injury or loss of life. In the third accident, the vessel was extensively damaged but was later repaired. Again, there was no crew injury or loss of life.

Maritime NZ is currently considering an amendment to **Rule Parts 40C and 40D – Design, Construction and Equipment –Non-SOLAS, Non-Passenger Ships and Fishing Ships** respectively, requiring vessels of less than 24 metres in length to be fitted with a fixed fire fighting system in enclosed engine bays acceptable to a SSM Surveyor or appropriate measures to allow the discharge of portable fire extinguishers into engine bays without a need to enter them.

2. It is recommended that an excerpt of this report be published in Seafood New Zealand to highlight the dangers of fires particularly on older wooden vessels.
3. That the report be produced in a format to publish in the Maritime NZ safety publication Lookout!.