MARINE OCCURRENCE REPORT

STRIKING AND STRANDING

"MACDONALD'S III"

PASSENGER TOUR BOAT
CHARLOTTETOWN, PRINCE EDWARD ISLAND

17 SEPTEMBER 1997

REPORT NUMBER M97M0112

The Transportation Safety Board of Canada (TSB) investigated this occurrence for the purpose of advancing transportation safety. It is not the function of the Board to assign fault or determine civil or criminal liability.

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Summary

On 17 September 1997 at approximately 0830 EDT in fine weather whilst under charter, with a crew of two and carrying 26 passengers, the "MACDONALD'S III" came in contact with a semi-submerged concrete pillar which pierced the hull. The vessel became hung up and listed. The passengers and crew were rescued by other nearby small boats. Eight passengers were slightly injured in the accident. There was no pollution.

Other Factual Information

Name	"MACDONALD'S III"
Port of Registry	Charlottetown, PEI
Flag	Canada
Registry/Licence Number	328781
Type	Cape Island design
Gross Tonnage	21.90
Length	12 m
Built	1967, Lower W. Pubnico, Nova Scotia
Propulsion	Acadia Leyland 74 kw
Number of Crew	Two
Number of Passengers	Twenty-six
Registered Owners	Imperial Harbour Cruises, Charlottetown, PEI

The vessel was built to the Cape Island closed boat design and had also been used as a local inshore ferry.

Life saving appliances consisted of 48 adult and 8 child life jackets in an unmarked heavy wooden box on the centre line in the well deck. The box was not secured to the deck. There were four life buoys, two of which were mounted on each side of the wheel-house. There were also three inflatable life rafts capable of accommodating 45 persons, stowed on top of the wheel-house.

The vessel was certified by Transport Canada Marine Safety (TCMS) on 27 May 1997. The certificate was valid until 30 September 1997, for voyages in Charlottetown Harbour and approaches, in fine weather, not more than five miles from shore. The certificate stipulated that the vessel could carry a maximum of 40 passengers, with a crew of three including the skipper.

Following a Canadian Coast Guard examination, which was related to a vessel the size of the "MACDONALD'S III" and to her trading limits, the skipper was issued the requisite Certificate of Competency. He had spent most of his adult life on boats in and around Charlottetown Harbour. The skipper who had the conduct of the vessel on this occasion also had the conduct of the vessel on 16 September 1995 when the vessel grounded in Charlottetown Harbour.

The Voyage

On 17 September 1997 at about 0820 ¹, 26 passengers boarded the "MACDONALD'S III" at the Terminal Wharf, Charlottetown. The vessel had been chartered for a cruise in Charlottetown Harbour, primarily to watch seals. At approximately 0830, the "MACDONALD'S III" came in contact with a semi-submerged concrete pillar which pierced the hull. At the time of the striking, a flood tide was running at an estimated rate of two to three knots and was setting the vessel towards the pillar. Immediately prior to the striking, the skipper was seen to have left the control position to go aft to point out seals to the passengers.

The vessel became hung up and developed a list. As the list developed, the box containing the life jackets reportedly slid to the low side of the well-deck, trapping some passengers and causing abrasions and bruising to their legs.

The skipper broadcast a MAYDAY message on a very high frequency (VHF) radio, which was responded to by Canadian Coast Guard (CCG) vessels. Independently, workmen from a nearby bridge construction team used their small boats to ferry the passengers from the "MACDONALD'S III" to a larger CCG vessel.

The tour guide assisted the other passengers into life jackets, reassured them and assisted in the evacuation and disembarkment. The passengers were subsequently taken ashore. Eight passengers reported minor injuries - bruises, cuts and back pains. One passenger later visited a local hospital where bruised ligaments were diagnosed.

Site of the Occurrence

The concrete pillar which was struck by the "MACDONALD'S III" is one of several old railway bridge supports. The bridge has been removed but the supports remain. Two supports have day markers which indicate the navigable channel, approximately 183m wide, near the road bridge (see chartlet). The pillar is of rectangular form measuring approximately 0.9m by 0.6m in plan view. It is surmounted by a square steel marker, painted green, mounted on a steel bar approximately 1.5 m above the top of the pillar. At the time of the striking, the top of the pillar was approximately 15cm above the water. On the other side of the navigable channel, a red triangle is similarly mounted on another concrete pillar.

Safety Precautions and Instructions to the Passengers

Reportedly, safety instructions were given to the passengers after boarding. These instructions included announcing the location of, and how to don, life jackets and the position of the inflatable life rafts stowed on top of the wheel-house. Such a safety announcement had been discussed with the owner/operator of the "MACDONALD'S III" subsequent to a fatality resulting from a "man overboard" incident on 16 August 1997 (TSB Report No. M97M0094) in Charlottetown Harbour.

¹All times are Eastern Daylight Time (UTC minus 3 hours).

One of the findings of the investigation into the grounding of 16 September 1995 (TSB Report No. M95M0092) was that the skipper had been distracted immediately prior to the grounding. Consequently, TSB Marine Safety Advisory No. 05/95 was forwarded to Transport Canada (TC) indicating the unsafe conditions associated with the operator being distracted by the activities and presence of passengers in the wheel-house. TC believed that the presence of others in the wheel-house had not contributed to the accident. As a precautionary measure, however, TC undertook to advise the owners of tour vessels that they should ensure that operators were not distracted by passengers.

Previous Damage to the Vessel

On 16 September 1995 in a period of fine weather and good visibility, the "MACDONALD'S III" sustained what at first appeared to be minor damage following a grounding in Charlottetown Harbour. However, a survey made subsequently by an underwriters surveyor deemed the vessel to be a constructive total loss.

The owners repaired the vessel and put her back into service under the command of the same skipper. Following these repairs, TCMS issued another Safety Inspection Certificate (SIC 16). The certificate permitted the vessel to carry up to 40 passengers.

Examination of the Vessel

Following the occurrence of 17 September 1997, the vessel was examined in a damaged and unrepaired condition ashore. It was supported on wooden blocks at the Terminal Wharf, Charlottetown.

The main engine, together with its principal service, piping and control systems had been removed previously for preservation purposes. The inspections were specifically focussed on the structural damage incurred as a result of the striking, stranding and subsequent recovery, as well as the general condition of the 30-year-old wooden hull. The "MACDONALD'S III" was found to be in a poor structural condition.

Detailed examination of the vessel indicated that the non watertight condition of the transverse bulkheads and the unsatisfactory condition of the hull represented a potential and unacceptable safety hazard. It was apparent that the hull had been in an unsatisfactory condition for some time before the latest damage was incurred. At the time of the striking, the vessel was in an unseaworthy condition.

Analysis

Because passengers come in a variety of shapes, sizes, mobility and sea-going knowledge, it is incumbent upon the prudent owner/operator to ensure that there is a competent skipper and a sufficient number of well-trained crew on the vessel. Life saving equipment should be clearly indicated and its use demonstrated both with placards and demonstration prior to departure from the wharf.

Passengers subsequently reported that the injuries they suffered were directly or indirectly caused by the movement of the heavy wooden box, containing the life jackets, sliding to the low side of the well deck after the vessel became hung up. The observance of basic seamanship by the skipper or by TCMS at inspection would have ensured that the box was properly secured. It was not and was a hazard to passengers and crew.

The skipper of the "MACDONALD'S III" had spent most of his adult life on boats in and around Charlottetown Harbour. He could, therefore, be deemed to have an intimate knowledge of the area, its tides, currents, and water flow.

Findings

- 1. The skipper left the vessel's control position to point out seals to the passengers: while he was doing this the vessel struck and became hung up on a concrete pillar at the edge of the channel.
- 2. The hull was holed in way of the engine compartment but the vessel did not flood and sink because it was supported by the underwater concrete pillar.
- 3. Following a previous occurrence involving the vessel in 1995, an underwriters' surveyor had declared it a constructive total loss.
- 4. After repairs were carried out, TCMS issued a new inspection certificate (SIC 16) to the vessel.
- 5. The certificate, which permitted the vessel to carry up to 40 passengers, was current at the time of this occurrence.
- 6. A post-occurrence inspection of the vessel indicated that, at the time of the striking, the "MACDONALD'S III" was in an unseaworthy condition.
- 7. No placard was posted indicating the location of life jackets, life rafts or life buoys nor were general safety instructions posted for the information of passengers.
- 8. Passengers were made aware of the safety equipment on board the vessel prior to departure from the wharf.

Causes and Contributing Factors

The "MACDONALD'S III" struck and became hung up on a concrete pillar after the skipper left the control position to alert the passengers to the proximity of seals. At the time, the vessel was in close proximity to known hazards and the flood tide was setting the vessel towards the concrete pillars.

This report concludes the Transportation Safety Board's investigation into this occurrence. Consequently, the Board, consisting of Chairperson Benoît Bouchard, and members Maurice Harquail, Charles Simpson and W.A. Tadros, authorized the release of this report on 23 March 1999.