

Summary Report  
Serious Harm Injury/Mooring  
Rope Failure  
*Osprey*  
11 August 2006





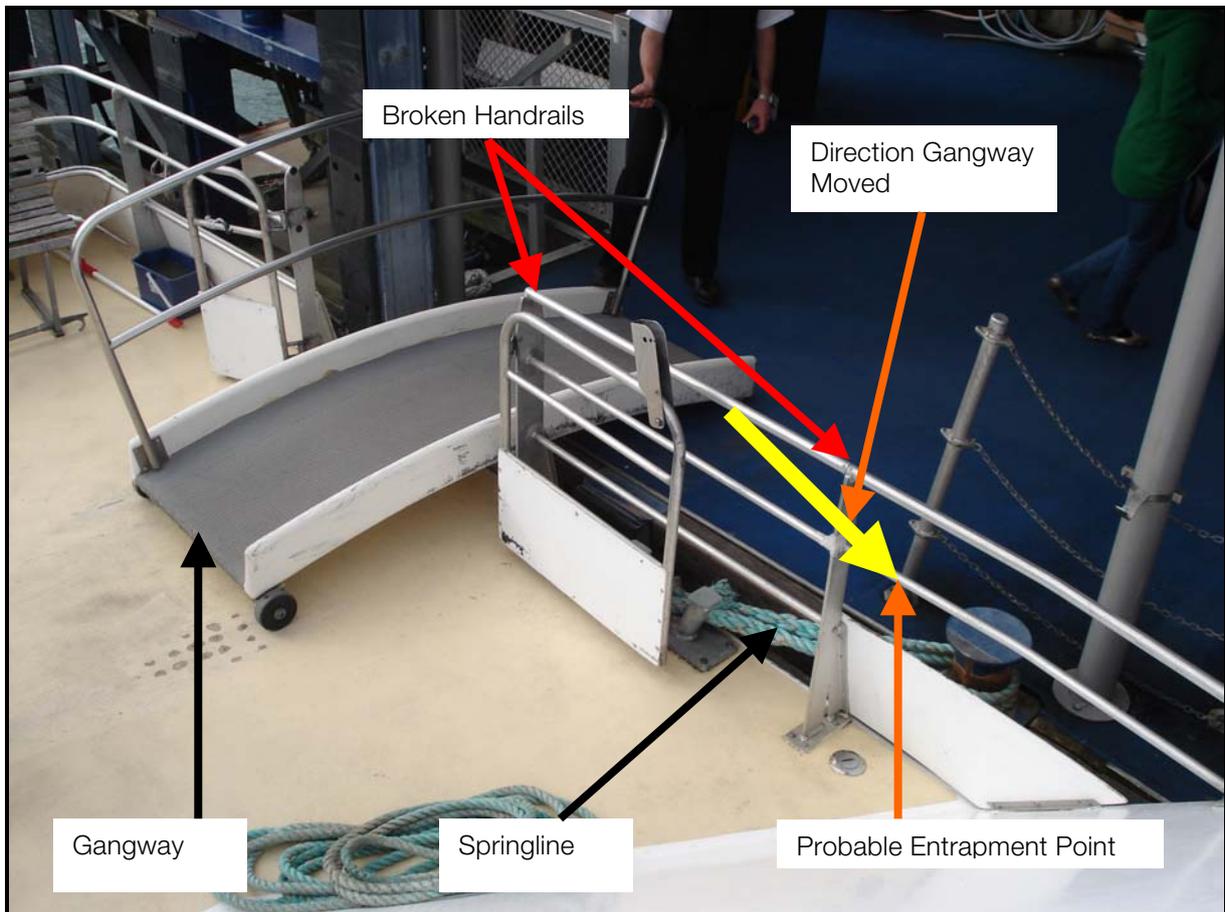
Photograph 1  
*Osprey*

# NARRATIVE

On 11 August 2006 at 0800 hours NZST (New Zealand Standard Time), the commercial passenger vessel **Osprey** was berthed at berth 1B in the ferry basin in Auckland Harbour. A spring line on the starboard bow with the starboard engine engaged was holding the vessel on the wharf face in preparation for passenger disembarkation. After the passenger gangway was deployed on to the wharf wake from other ferry vessels caused **Osprey** to pitch. A large passenger ship that was berthing in the basin may also have contributed to the wake encountered by **Osprey**.

The Master increased revolutions on the starboard motor to increase hull pressure on the wharf face to stabilize the vessel's motion. When this was unsuccessful he engaged the port engine. The vessel continued to surge against the wharf face. The pressure of the spring line on the forward horn of the cleat caused the horn to break.

As a result **Osprey** moved forward on the berth. This in turn caused the gangway to catch on the wharf and break a section of the vessel's handrail. The shore side section of the gangway then skewed towards the deckhand who was on the wharf. His foot was caught between the gangway and an upright on the wharf. He suffered two hairline fractures in his foot (See *Photographs 2 & 3 - Gangway & Cleat*).



**Photograph 2**  
Gangway & Cleat



Photograph 3

# FINDINGS

The cleat was made of heavy galvanised steel. Examination of the section that broke disclosed internal corrosion. This was not visible externally.

The failure was due to:

- The weakened condition of the cleat due to corrosion
- The turbulence in the basin causing the vessel to pitch with associated increased pressure on the cleat.
- The increased pressure placed on the cleat due to the additional revs on both engines.
- The large number of passengers moving on to the foredeck for disembarkation caused the starboard bow to drop. As result the cleat was below the level of the wharf creating a 45° angle up to the wharf. This caused the spring line to ride on to and exert pressure at the top of the cleat horn. The leverage angle exerted greater pressure than normal on the base of the horn contributing to its failure.

## ACTION TAKEN

- The owner has replaced the broken cleat and will check and relace all other cleats if corroded.
- A Safety Alert was issued to all crew advising as follows:

*Safety Alert*

*14 August 2006*

*Gangway Procedures*

*With a recent incident where equipment failure lead to a deckhand's limb being broken from the gangway hitting his foot. Positioning of a crew member around a gangway when loading or unload a vessel is important.*

*Could crew members please ensure they take note of the correct side of the gangway to stand in case a line broke or other equipment failed.*

*Ideally the preferred positioning to stand on the gangway is the other side to which the vessel is steaming on the line. Therefore if the vessel moved you would not be taken out by the gangway as it moved foreward.*

- The Auckland Harbourmaster has commissioned a report on wake in the inner harbour. A NIWA wave data buoy is also being utilized to provide data on wake.
- The Auckland Harbourmaster has had meetings with ferry operators to address the question of dangerous wake in the harbour. This has resulted in changes in ferry operational practises.
- In conjunction with Ports of Auckland the Auckland Harbourmaster will shortly be initiating a berthing window for cruise ships. This will prevent them berthing in the ferry basin during peak ferry movement.

# SAFETY RECOMMENDATIONS

It is recommended that:

1. The danger of entrapment by the gangway is entered in to **Osprey's** hazard register. In commenting on the draft report, the owners of **Osprey** advised that this Recommendation has been carried out.
2. Operational procedures require that the gangway is not deployed until any dangerous wake has subsided. In commenting on the draft report, the owners of **Osprey** advised that this Recommendation is part of their Standard Operating Procedure.
3. Operational procedures require that after deployment of the gangway if any dangerous wake develops all passengers and crew are kept well clear of the gangway until the dangerous wake has subsided. In commenting on the draft report, the owners of **Osprey** advised that this Recommendation is part of their Standard Operating Procedure.
4. The Auckland Harbourmaster reinforce with ferry operators operational procedures currently in force to prevent dangerous wake and discuss any further measures that can practically be applied to prevent dangerous wake in the ferry basin.

## VESSEL DETAILS

|                                   |                            |
|-----------------------------------|----------------------------|
| <b>Ship Name:</b>                 | <i>Osprey</i>              |
| <b>Ship Type:</b>                 | Restricted Passenger Ship  |
| <b>Certified Operating Limit:</b> | Inshore                    |
| <b>Port of Registry:</b>          | Auckland                   |
| <b>Flag:</b>                      | New Zealand                |
| <b>Built:</b>                     | 1994                       |
| <b>Construction Material:</b>     | GRP                        |
| <b>Length Overall (m):</b>        | 19.50                      |
| <b>Gross Tonnage:</b>             | 148                        |
| <b>Registered Owner:</b>          | Just Cruising Charters Ltd |
| <b>Ship Operator/Manager:</b>     | Mike Clothier              |
| <b>SSM Company:</b>               | SGS-M&I                    |
| <b>Accident Investigator:</b>     | Ian Howden                 |