



AUSTRALASIAN INSTITUTE  
OF MARINE SURVEYORS

# Shipshape

March 2026



**WORLD'S LARGEST BATTERY-ELECTRIC SHIP  
POWERS UP IN TASMANIA**

# MV *Island Trader* refloating report

SHORTLY after 0925 hrs on Monday, 17 October 2011 the MV *Island Trader* went aground on a lee shore inside the lagoon of Lord Howe Island, while unberthing for the return voyage to Port Macquarie. The wind was from the SSW gusting 25 to 30 knots.

The ship's final resting position was 31o31.42' S, 159003.44'E, and the heading 1250T (1120C, T/E 13E). The vessel became firmly aground on calcareous sand and small platforms of Ned's Beach calcarenite beneath the after-body and abaft the wheelhouse.

The ship was refloated at 1812 hrs on Monday, 24 October and berthed "portside to" back alongside the jetty for internal and external inspection by an American Bureau of Shipping (ABS) surveyor and commercial divers respectively.

The vessel's existing Certificate of Class remained valid; however, an outstanding recommendation for inspection by approved ABS divers at the next port of convenience (Port Macquarie) was issued by the Classification Society surveyor. The ship sailed on the tide for Port Macquarie the following evening,

## Tuesday, 25 October

The stranding occurred within the New South Wales Marine Park but well clear of any prescribed Sanctuary Zone or coral community. The calcarenite outcrop upon which the ship settled supported some small specimens of live coral (*Aeropora solitaryensis*) and algae and very few, if any, sedentary fish.

It is believed the grounding contributed infinitesimally to any natural weathering process. No noxious contamination to



*MV Island Trader stranded on calcareous sand and calcarenite outcrops. Note the oil boom encircling the ship.*

the environment occurred and a precautionary oil boom was rigged to enclose the ship while stranded.

## Ship Response

The master and crew immediately put into effect the ship's Operations Manual procedures in line with a commitment to safety, prevention of pollution and quality management. The Grounding Checklist was immediately consulted and the vessel's position verified continually.

Details of an onboard investigation by the master concluded with the release of an Incident Report to the

ship's owner, Lord Howe Island Seafreight Pty Ltd.

Further implementation of the Safety Management System, particularly attention to the Shipboard Oil Pollution Emergency Plan (SOPEP), was also instigated.

## Shore staff emergency response

The company's shore-side Emergency Response Team (ERT) and directors reacted in accordance with the company's marine management system and worked attentively with the ship's master and crew, and members of the Lord Howe Island Board, NSW Maritime,

NSW Police, NSW Department of Environment & Heritage and others to assemble shore management capabilities and deploy oil spill response equipment.

Portside Marine Pacific was contracted as an independent consultant to aid in the implementation of a Marine Refloat Action Flow Plan and report the events and outcome.

### Assessment and refloat

On Sunday, 23 October 2011, at 1752 hrs, the ship's drafts were recorded when the actual tide height was 1.813 metres. Computations after consulting the ship's Hydrostatic Tables gave an estimated loss of buoyancy of 28.2 tonnes. Using a coefficient of 0.8, it was estimated the static friction to be 22.56 tonnes, thus requiring at least this force to heave the ship free of the calcarenite outcrop and calcareous sand.

It was also estimated that the resultant force(s) (using the theorem of "Parallelogram of

Forces") that had been applied so far was approximately 7.0 tonnes and thus far less than required. On the other hand, if the calculated force of 22.56 tonnes had been applied without first diminishing loss of buoyancy, then the chance of damage to the vessel could have been significant.

At this time, three directional forces were being applied.

The port anchor had been laid out with approximately two shackles of cable and leading approximately 0930T.

A 56mm polypropylene hawser led approximately 1600T from the starboard bow Panama fairlead on the foc'sle head and had been secured to two anchors. Each of these anchors was on a separate chain leg diverging approximately 450 apart (bottom type: sand).

A third hawser of similar size was rigged leading approximately 2100T from the starboard quarter and made fast to two Danforth type anchors in tandem (bottom type: sand).

On the following day – Monday, 24 October – during the morning high tide, soundings were recorded around the ship and depths > 2.5 metres were mostly found along the starboard side and ahead of both bows.

Throughout the day, "back cargo" was discharged into a lighter and sent ashore, the ship was de-ballasted of sea water and 10 tonnes of fresh water was transferred to the forepeak tank in order to create a downward moment of force (tonne metres) at the bows.

The heavier starboard anchor (estimated > 1.0 tonne) and approximately two shackles of cable were deployed using the double-ended steel lighter to further lighten (provide rise) the vessel and provide heaving power. This anchor was laid directly ahead, so as to gain the full benefit of the five-tonne winch.

It was now estimated there would be a high probability of refloating the ship provided the height of the incoming



*MV Island Trader heeling to starboard and with port anchor laid out and a polypropylene hawser leading approximately 1600T from the starboard bow. Note also a boat rope rigged down the portside.*



*MV Island Trader chine and topside plate at engine room level.*

tide reached 1.85 metres. The predicted height of the tide was to be 1.690 metres at 1843 hrs. Previous actual tides observed over the past 24 hours had been recorded to be higher than the predicted tide heights (mhl), so it was assumed this would again occur on this high tide.

Subsequent computations showed that there was, in fact, no loss of buoyancy provided the tide reached 1.85 metres. Notwithstanding this, in practice the ship did need to be heaved free.

At approximately 1655 hrs the oil boom was removed from around the ship and at 1712 hrs all slack taken out of the two anchor cables and the two hawsers. The intention was to heave the stern free of the calcarenite platform in a direction of approximately 2100T, being the estimated approximate reciprocal direction of grounding, and at the same time heave the vessel ahead.

At approximately 1750 hrs, the port anchor flukes broke free and this anchor started to

“come home” and thus rendered ineffective.

At 1800 hrs, the draft marks were recorded so as to determine the ship’s displacement for this particular time.

At 1812 hrs, the ship floated free after heaving on the starboard anchor (five-tonne) and starboard quarter (five-tonne). The master ordered engines, the anchors recovered in their respective hawse pipes, and the hawsers on the starboard bow and starboard quarter were slipped to be recovered by small line vessels positioned on standby for this task.

The ship was subsequently berthed “portside to” alongside the jetty and all tanks, bilges and void spaces immediately sounded.

At high water the next morning, Tuesday 25 October, commercial divers (including the author) inspected the hull plate, sea inlet boxes, skegs, propellers, rudders, zinc anodes, transducer and rudder bearings.

No significant structural damage was deemed to have occurred, apart from some minor shallow indentation and paint loss.

During the day, an ABS surveyor inspected seawater ballast tanks numbers 2P and 2S and 4P and 4S and recorded no notable damage. The existing Certificate of Class remained valid and the ship considered seaworthy to continue trading.

### **Conclusion**

The vessel stranding and subsequent uneventful refloat illustrated unequivocally the company’s safety management system is reliable and works. Government agencies, individual islanders and others provided assistance to the ship’s owner, master and author in one way or another to achieve the best possible outcome.

The success of the refloating procedure was to first lighten the ship, then transfer fresh water within the ship, apply heaving forces in the correct directions and await sufficient water. No apparent damage appears to have occurred to the ship or the environs of Lord Howe Island; however, it does demonstrate that ongoing vigilance by all parties must continue to be maintained.

Regular drills (floating staff and shore staff) and the need for continuing maintenance of valuable assets – such as the island’s steel lighter – are undeniably essential for the preservation of safe shipping to and from Lord Howe Island.

Note: Chief Officer Wayne Oakes kindly provided the photos included in this article.

**Capt Peter Kerkenezov BM  
AIMS member**