

Investigation Report
Jay Penelope
Severe weather incident
13 August 2010



Maritime New Zealand

Maritime New Zealand (MNZ) is a Crown entity appointed under Section 429 of the Maritime Transport Act 1994, with the responsibility to promote maritime safety, security and the protection of the marine environment.

Section 431 of the Maritime Transport Act sets out MNZ's functions. One of those functions is to investigate and review maritime transport accidents and incidents.

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Executive summary

On the afternoon of Thursday, 12 August 2010, the fishing vessel **Jay Penelope** anchored in Smoothwater Bay, which is immediately south of Jacksons Bay in South Westland.

Due to a poor forecast for the area, four other fishing vessels were at anchor in Smoothwater Bay. The bay gave the best shelter for a significant distance.

During the night, the wind stopped blowing and the swell that had built up backed and was able to enter the open bay. This caused large waves to break over a number of the vessels while they were still at anchor.

Jay Penelope began to list after being struck by a number of larger waves. As a result, the skipper decided to exit the bay. As the vessel had cleared the immediate entrance, the main engine failed. At this time, the skipper and three crew members abandoned ship using the liferaft. They were picked up by another vessel also leaving the area.

Just before abandoning the vessel, the anchor was dropped. The next day, after the weather had cleared, the vessel was found riding to the anchor and was towed back to Jacksons Bay, where temporary repairs were made that allowed the vessel to steam to Port Nelson for more permanent repairs.

Event

1. After completing fishing on 12 August 2010, the skipper/owner of **Jay Penelope** decided to go to anchor in Smoothwater Bay. On board were the skipper, two crew members and the partner of one of the crew.
2. MetService had issued a storm warning for winds of 50 knots from the north and a northerly swell rising to 5 metres. Five vessels, including **Jay Penelope**, were taking shelter in the bay.
3. **Jay Penelope** was at anchor by 1630 hours. The skipper set the watches and retired to bed at about 1930 hours. The radar, GPS and VHF radios were left on and the two crew members took anchor watches during the evening.
4. The wind peaked at about 2200 hours and by midnight the skipper was up in the wheelhouse. At this time, the wind had died away, leaving very poor visibility in the rain.
5. Due to the drop in wind, the prevailing northerly swells were able to then bend around the northern point of the bay and start to break over the reef at the entrance and enter the bay.
6. A number of vessels took breaking waves over their bulwarks, some suffering damage in the process. The skipper of **Jay Penelope**, fearing the worst, decided to start the main engine just in case it was needed.
7. The vessel was taking a number of waves over the port side, which eventually heeled the vessel to such an extent that the fish in the hold moved to the starboard side, creating a severe list to starboard. The crew member's partner suffered an injury to her foot as a box of hammer locks was thrown off the shelf.
8. At about 0200 hours on 13 August, the skipper decided they should leave the bay (even with the list), as the wave action was making the situation untenable. They departed, along with all of the other vessels for the same reasons.
9. As **Jay Penelope** was clearing the reefs at the entrance to the bay, the main engine failed. The crew dropped the anchor and abandoned ship into the liferaft, where they were immediately picked up by another vessel exiting the bay.
10. They all made their way to Jacksons Bay, where shelter was available to some extent from the backing northwest swell.
11. Later that day, **Jay Penelope** was found to be riding at anchor, still with a large list, just outside Smoothwater Bay. It was towed back to Jacksons Bay and temporary repairs were made that allowed it to steam to Port Nelson for repairs.

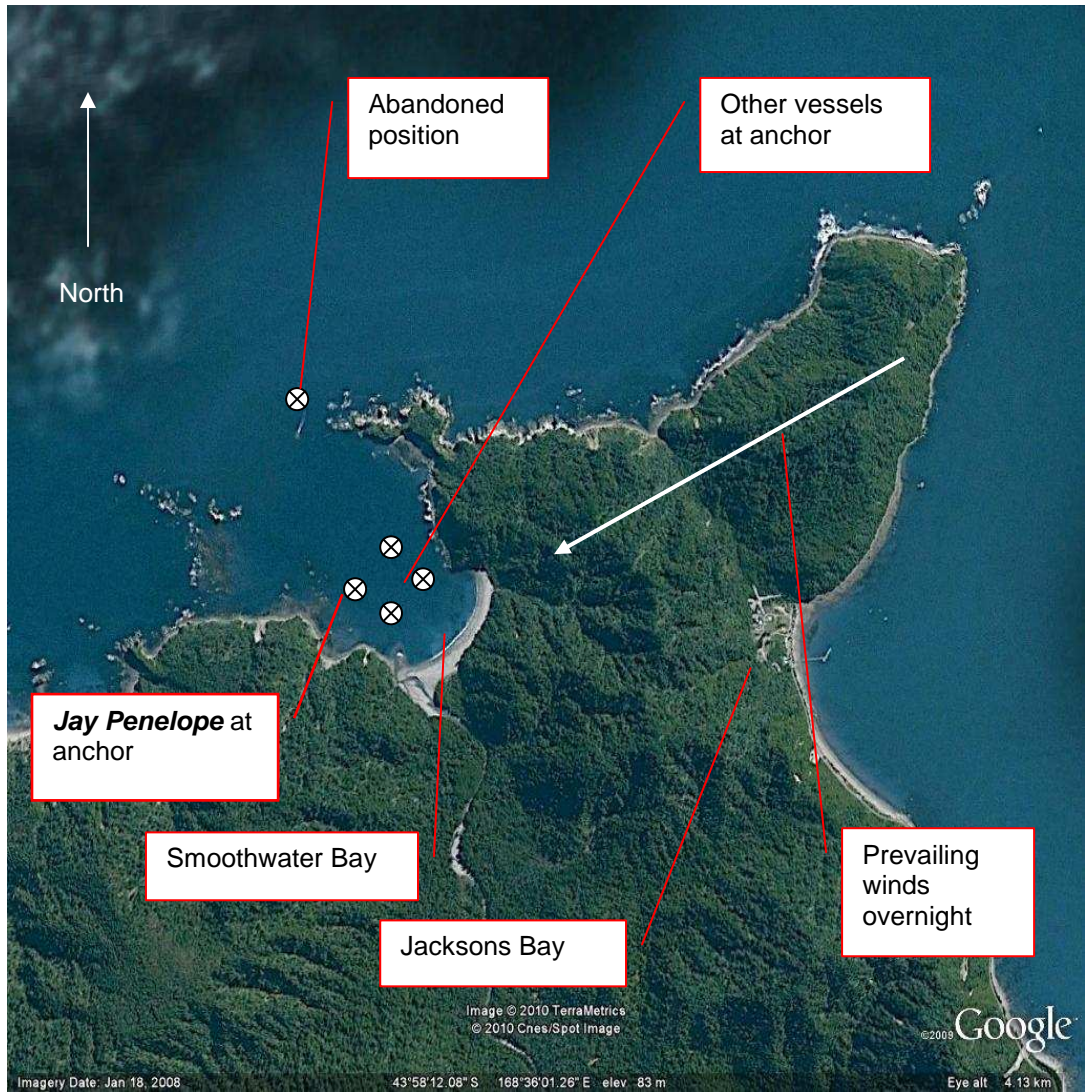


Figure 1 Google Earth image of Smoothwater Bay and Jacksons Bay

Analysis

12. Information was gathered from documents held by MNZ and from interviews with the skipper and crew on board the vessel, and other skippers who were in the area that night.
13. The vessel had about 10 tonnes of wet fish on board, stored in plastic Dolav bins. These bins are large plastic boxes about 1200 millimetres by 1000 millimetres. The bottom of the upper bin fits snugly inside the lower one, allowing for controlled secure stacking in normal operating conditions.



Figure 2 Dolav bins stacked in the hold

14. The skipper stated that the vessel had listed to about 70 degrees. This allowed the upper bins to disconnect from the lower Dolav bins and the fish to flow freely out of the bins towards the starboard side of the hold. The skipper estimated that about 4 tonnes of fish had moved to the starboard side of the hold.
15. Sea water was also able to enter the starboard fuel tank vent, situated about 1.8 metres above the deck, further adding to the list.



Figure 3 Fuel vent on the gantry

16. Due to the list, sea water was able to enter the vessel galley and mess area through a window, which was also situated about 1.8 metres above deck. Significant water damage occurred in the accommodation area.

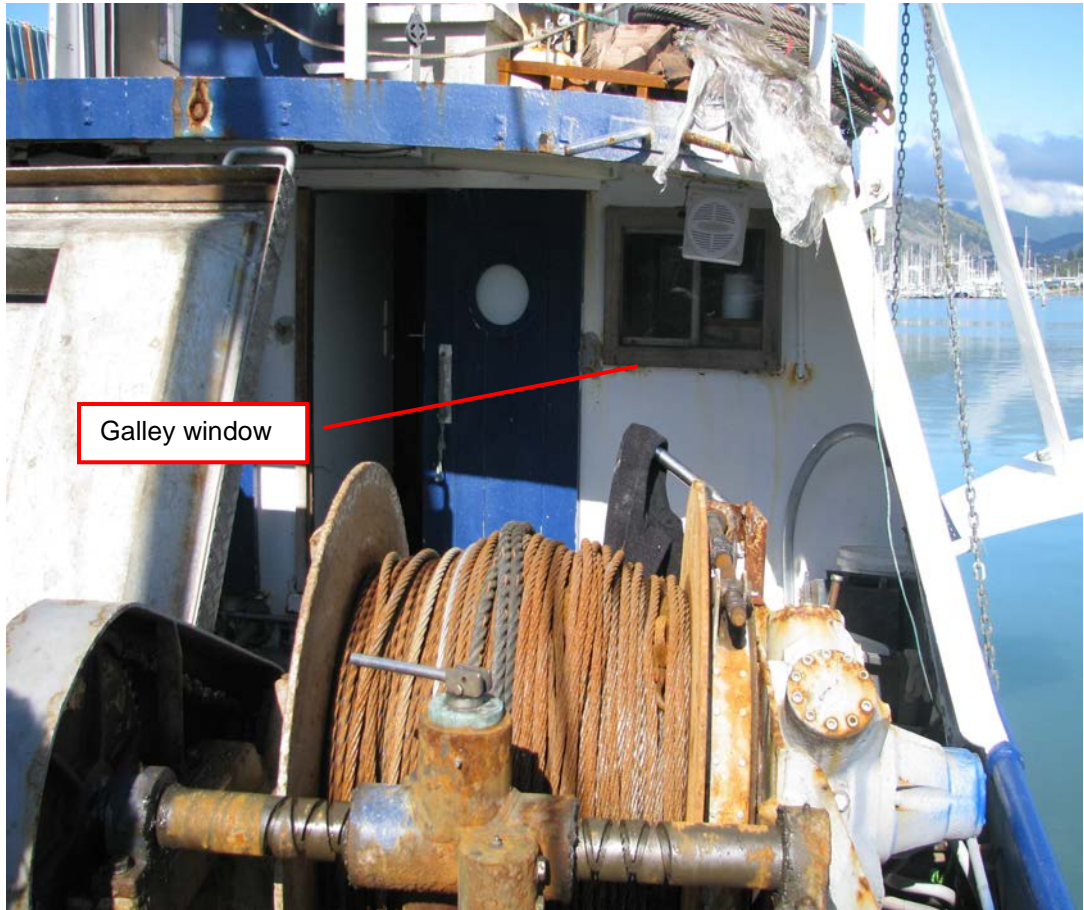


Figure 4 Galley window

17. As a result of the list, the main engine either sucked fouled fuel from the tanks or was automatically shut down due to lack of oil on the sensors in the engine.

Conclusions

18. **Jay Penelope**, along with other vessels, was sheltering from forecast storm-force weather in a known safe anchorage.
19. The weather dropped quickly after midnight, which allowed the swell that had built up to back and enter the bay.
20. Several vessels sustained damage and all decided to exit the bay at about 0200 hours on 13 August.
21. **Jay Penelope** was struck by a number of large waves, which caused some of the fish to move as part of a free surface effect in the hold, creating a list. This list was perpetuated by water entering the starboard fuel tank and accommodation area.
22. Had the Dolav bins been partitioned and secured, then the fish and bins would not have moved. However, the system in use was suitable for normal operating conditions and roll of the vessel during normal weather patterns.
23. The skipper was monitoring the weather conditions and situation of the vessel through anchor watches. He was quickly able to ascertain that the situation on board was becoming dangerous.
24. The skipper attempted to leave the bay, but the main engine shut down shortly after clearing the entrance. The vessel was abandoned safely and left at anchor.

Recommendations

25. As a result of the above findings, it is recommended that this report is adapted for publication in MNZ's *Lookout!* magazine.