

MARINE OCCURRENCE REPORT

**GROUNDING AND SINKING
OF THE FISHING VESSEL "GYPSY LASS" AND
GROUNDING OF THE FISHING VESSEL "ROYAL PRIDE" WITH THE
SUBSEQUENT SWAMPING AND BEACHING
OF THE FAST RESCUE CRAFT "POINT HENRY NO. 2"**

**NEAR PRINCE LEBOO ISLAND, BRITISH COLUMBIA
14/15 FEBRUARY 1994**

REPORT NUMBER M94W0010

Canada

MANDATE OF THE TSB

The Canadian Transportation Accident Investigation and Safety Board Act provides the legal framework governing the TSB's activities. Basically, the TSB has a mandate to advance safety in the marine, pipeline, rail, and aviation modes of transportation by:

- conducting independent investigations and, if necessary, public inquiries into transportation occurrences in order to make findings as to their causes and contributing factors;
- reporting publicly on its investigations and public inquiries and on the related findings;
- identifying safety deficiencies as evidenced by transportation occurrences;
- making recommendations designed to eliminate or reduce any such safety deficiencies; and
- conducting special studies and special investigations on transportation safety matters.

It is not the function of the Board to assign fault or determine civil or criminal liability. However, the Board must not refrain from fully reporting on the causes and contributing factors merely because fault or liability might be inferred from the Board's findings.

INDEPENDENCE

To enable the public to have confidence in the transportation accident investigation process, it is essential that the investigating agency be, and be seen to be, independent and free from any conflicts of interest when it investigates accidents, identifies safety deficiencies, and makes safety recommendations. Independence is a key feature of the TSB. The Board reports to Parliament through the President of the Queen's Privy Council for Canada and is separate from other government agencies and departments. Its independence enables it to be fully objective in arriving at its conclusions and recommendations.



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.

Marine Occurrence Report

Grounding and Sinking of the Fishing Vessel "GYPSY LASS" and Grounding of the Fishing Vessel "ROYAL PRIDE" with the Subsequent Swamping and Beaching of the Fast Rescue Craft "POINT HENRY NO. 2"

near Prince Leboo Island, British Columbia

14/15 February 1994

Report Number M94W0010

Synopsis

In the evening of 14 February 1994, in heavy weather conditions, the skipper of the "GYPSY LASS" was unable to restart the main engine after stopping for a precautionary change of fuel filters before entering Edith Harbour, British Columbia. Another fishing vessel, the "ROYAL PRIDE", was called for assistance, but the "GYPSY LASS", which had been carried into shoal water, grounded a short time after the "ROYAL PRIDE" arrived on the scene. While standing by, the "ROYAL PRIDE" was subsequently disabled by kelp fouling her Kort nozzle and she also grounded. The Fast Rescue Craft "POINT HENRY NO. 2" which came to their assistance was swamped while attempting to rescue the crew of the "ROYAL PRIDE" and was beached. The crews of the three vessels were rescued by a U.S. Coast Guard helicopter.

The Board determined that, while close inshore in adverse environmental conditions, the "GYPSY LASS" grounded after her main engine failed to restart because no measures had been taken in anticipation of the main engine not restarting. The "ROYAL PRIDE" grounded because she entered an area of heavy seaweed and lost propulsion when kelp was drawn into her Kort nozzle. The Fast Rescue Craft "POINT HENRY NO. 2" was swamped while attempting to manoeuvre to effect a rescue in adverse operating conditions.

Ce rapport est également disponible en français.

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1.0 Factual Information

1.1 Particulars of the Vessels

	"GYPSY LASS"	"ROYAL PRIDE"
Official Number	391727	811213
Port of Registry	Nanaimo, B.C.	Vancouver, B.C.
Flag	Canadian	Canadian
Type	Stern trawler	Stern trawler
Gross Tons	37	88
Length	14.9 m	16.8 m
Draught	F: 2.13 m A: 2.44 m	F: 3.65 m A: 3.65 m
Crew	3	3
Built	1979, Campbell River, B.C.	1988, Vancouver, B.C.
Propulsion	Diesel engine, capable of 224 kW (300 BHP), driving a single fixed-pitch propeller	Diesel engine, capable of kW (420 BHP), driving a single controllable-pitch propeller in a Kort nozzle
Managing Owners	Frederic A. Hutchson, Prince Rupert, B.C.	J.S. McMillan Fisheries Ltd., Vancouver, B.C.

1.2 Description of the Vessels

The "GYPSY LASS" and "ROYAL PRIDE" were of fibreglass construction and steel construction respectively. The wheel-house on both vessels was situated forward of amidships.

¹ See Glossary for all abbreviations, acronyms, and definitions.

² Units of measurement in this report conform to International Maritime Organization (IMO) standards or, where there is no such standard, are expressed in the International System (SI) of units.

The "POINT HENRY NO. 2" is a rigid-hulled, inflatable Fast Rescue Craft (FRC) fitted with a centre console and powered by twin 70 HP outboard motors. The FRC is routinely attached to the Canadian Coast Guard (CCG) Search and Rescue (SAR) cutter "POINT HENRY" based in Prince Rupert, British Columbia.

1.3 History of the Voyage

On the afternoon of 14 February 1994, the "GYPSY LASS" was fishing to the west of Prince Leboo Island. The wind was gale force from the north-east and the vessel was moving heavily in rough seas. The skipper decided that the catch did not warrant continuing to fish in the poor weather conditions and, at about 1545, the "GYPSY LASS" left the fishing grounds to head for Edith Harbour. At about 1630, as the vessel headed in, a change in engine cadence was heard and the skipper checked the primary fuel filter and discovered water and dirt in the sediment bowl. He stopped the main engine and changed the filter. He then restarted the main engine and resumed the inward passage to Edith Harbour.

The filter was checked again at about 1720 and more dirt and water were discovered. The skipper again changed the filter, the engine was restarted and the vessel continued toward port.

At about 1910, when the vessel was about five cables off the entrance to Edith Harbour, the skipper stopped the main engine to change the primary and secondary fuel oil filters. He did not want to take a chance that the engine might fail while entering port. However, this time, he was unable to restart the engine after changing the filters.

The wind was veering and, as the skipper worked on the engine, he realized that the vessel was being carried toward shallow water and called the "ROYAL PRIDE" on channel 8 on the very high frequency radiotelephone (VHF R/T) to advise that he required assistance. He then continued trying to restart the motor. The "ROYAL PRIDE" had been fishing with the "GYPSY LASS".

At about 1915, the "ROYAL PRIDE" left Edith Harbour, arriving on the scene at about 1930 to find that the "GYPSY LASS" had drifted into shoal water. The "ROYAL PRIDE" was unable to assist but remained standing by. The skipper of the "ROYAL PRIDE" advised the "GYPSY LASS" to drop anchor and to notify Prince Rupert Coast Guard Radio Station (CGRS) of the situation. At 1943, the "GYPSY LASS" advised Prince Rupert CGRS of the vessel's predicament and dropped an anchor (an anchor had not been dropped before because the skipper anticipated that the main engine would restart).

The wind had veered to the south-east at 25 to 30 knots with one- to two-metre seas and the combined effect of an ebbing tidal current and the onshore wind caused the "GYPSY LASS" to drag anchor. She grounded off an unnamed island near Prince Leboo Island, about one mile south-west of the entrance to Edith Harbour. As the crew members prepared to abandon ship, they gathered supplies and flares, and put on their immersion suits.

At 2004, the CCGC "POINT HENRY" was tasked by Rescue Co-ordination Centre (RCC) Victoria to assist the "GYPSY LASS" and, at about 2212, the "POINT HENRY" was on the scene.

³ All times are PST (Coordinated Universal Time (UTC) minus eight hours) unless otherwise stated.

The cutter's FRC, "POINT HENRY NO. 2", under the command of the chief officer of the "POINT HENRY", was dispatched and landed a crew member with a portable VHF R/T near the grounded vessel to better assess the situation. However, the FRC was unable to rescue the crew on the "GYPSY LASS" because of the rocks and breaking seas in the area where the fishing vessel had grounded.

At 2315, the "ROYAL PRIDE" lost propulsion when kelp fouled her Kort nozzle. The skipper, hoping to slow the rate of drift, dropped both trawl doors and let go the anchor. He advised the "POINT HENRY" of the situation and waited for assistance. In anticipation of having to abandon ship, the crew members donned their immersion suits.

After returning to the "POINT HENRY" to pick up additional VHF radios as the FRC's built-in VHF R/T was unserviceable, the "POINT HENRY NO. 2" attempted to reach the "ROYAL PRIDE" with the lightweight tow-line from the "POINT HENRY". However, the line was not long enough and the FRC lost the tow-line after it fouled the port propeller. The FRC then went alongside the "ROYAL PRIDE" and two of the fishing vessel's three crew members jumped aboard. While attempting to rescue the last deck-hand, the FRC was struck by a series of large swells and was swamped.

Although three of the four persons on the FRC were washed overboard, they managed to reboard. When the chief officer restarted the engines, he decided to beach the FRC on a nearby, small unnamed island. The two crew members from the "ROYAL PRIDE" and two crew members from the FRC landed there.

Meanwhile, the "GYPSY LASS" had been holed and sank, forcing her crew into the water. Two of the crew members managed to climb onto the large nearby rock where the crew member from the FRC had already landed. The skipper was carried toward the small unnamed island where he was assisted by the crew members from the "ROYAL PRIDE" and the FRC.

All those on the island found shelter in nearby trees and huddled together to keep warm. At 0212, 15 February, an American SAR helicopter, USCG 6022, the closest resource capable of performing the mission, was tasked from Sitka, Alaska.

At 0258, all the crew members were rescued and transported to Prince Rupert, where they arrived at 0325. They were taken to the Prince Rupert hospital, examined and later released.

1.4 Injuries to Persons

The three crew members from the "GYPSY LASS", the three crew members from the "ROYAL PRIDE" and two crew members from the "POINT HENRY" who were manning the FRC were immersed in the sea, but no injuries were reported.

1.5 Damage to the Vessels

The "GYPSY LASS" was declared a total loss.

A post-casualty inspection of the "ROYAL PRIDE" revealed extensive damage to the bottom shell plating and associated framing. The vessel was salvaged and towed to Prince Rupert for temporary repairs before being towed to Vancouver for permanent repairs.

The FRC "POINT HENRY NO. 2" sustained extensive structural damage and minor motor damage. The FRC was shipped to Victoria to be repaired and repowered with two 90 HP outboard motors.

1.6 Environmental Damage

No significant environmental damage was reported. The "GYPSY LASS" was carrying about 4,100 litres (900 gallons) of light diesel fuel. Oil which leaked into the ocean was dispersed by the action of the wind and waves.

1.7 Vessel Certification

The "GYPSY LASS" and the "ROYAL PRIDE" were certificated, manned and equipped in accordance with existing regulations.

The "POINT HENRY NO.2" was not subject to inspection by the Ship Safety Branch of the CCG, but was maintained to CCG Fleet Systems standards for such craft.

1.8 Crew Certification and Experience

"GYPSY LASS"

None of the crew on the "GYPSY LASS" was in possession of a certificate of competency nor were they required to be by regulation. The skipper had experience in gillnetters, seiners and trollers. He had been skipper on the "GYPSY LASS" since 1988. The other crew members were also experienced fishermen.

"ROYAL PRIDE"

The skipper of the "ROYAL PRIDE" was the holder of a Fishing Master, Class III, Certificate of Competency. He had experience on gillnetters, seiners and trollers and had been skipper on this vessel since 1992.

The other crew members on the "ROYAL PRIDE" did not possess certificates of competency nor were they required to by regulation. They were experienced fishermen.

"POINT HENRY NO.2"

The chief officer of the "POINT HENRY" who was in charge of the FRC was the holder of a Watchkeeping Mate Certificate. He had been employed with the CCG since 1981. The other crew members on the FRC were also experienced mariners but were not certificated nor were they required to be by regulation.

1.9 Weather

Environment Canada reported that a low pressure system from the south-west reached the Queen Charlotte Islands, British Columbia, on the evening of 14 February. The system caused strong to gale-force north-easterly winds in the afternoon which veered and eased to strong south-easterlies in the evening as an associated frontal system crossed the area.

The air temperature was about 3°C and mixed rain and snow from the front reduced visibility at times to below two miles. The water temperature was about 12°C.

1.10 Tidal Information

On 14 February 1994, high water at Hudson Bay Passage, British Columbia, was predicted to occur at 1553 with a height of 5.4 m above chart datum. Low water was predicted to occur at 2152 with a height of 1.5 m above chart datum.

Hudson Bay Passage is oriented south-west/north-east, and the flood tide sets to the north-east and the ebb to the south-west in the passage. The Canadian Hydrographic Service (CHS) chart of the area shows the ebb tide current as about 1.5 knots, fair with the channel, at the south-west entrance to the passage. The "GYPSY LASS" grounded at about 2004, somewhat less than two hours before the predicted time of low water.

1.11 Search and Rescue Resources

The efforts of the vessels tasked by the RCC to assist the "GYPSY LASS" were hampered by the shoal water in the area.

The CCG helicopter located at Prince Rupert takes part in SAR operations whenever the circumstances or conditions permit, but it is not a primary SAR unit and is not equipped for night rescue.

The Canadian aircraft and helicopters normally used for SAR missions are located in Canadian Forces Base Comox. A memorandum of understanding with United States authorities allows Canadian RCCs to request resources from the USCG if the RCC decides that is the best option and similarly USCG RCCs can request CCG resources. In this instance, the transit time of Canadian aircraft to the accident site would have been longer than that of the USCG helicopter from Sitka.

1.12 "GYPSY LASS" Fuel

The "GYPSY LASS" had taken a full load of fuel before starting the trip, sailing with about 6,100 litres (1,350 gallons) of fuel in her tanks which had a nominal capacity of about 6,350 litres (1,400 gallons). The vessel was in her fourth day at the fishing grounds and about 4,100 litres of fuel remained at the time of the grounding.

The vessel was fitted with four fuel tanks: two fibreglass tanks aft in the lazaret and two steel tanks in the engine-room. The tanks were interconnected such that fuel for the main engine could be drawn from either the after tanks or the forward tanks or from all the tanks simultaneously. Fuel could also be run from the after tanks to the forward tanks but, when the vessel's tanks were nearly full, only the forward tanks could be used to supply the main engine as the return line from the engine did not go back to the after tanks. At the time of the grounding, as a normal practice to minimize stern trim, the "GYPSY LASS" was burning fuel which had been run down from the after tanks. These tanks were suspected of being the source of the contamination.

Water contamination of the fuel supply may occur because of a leak, the fuelling facilities themselves, or condensation. There was no evidence of a leak which would have affected the vessel's fuel system before the grounding. The trip was the vessel's third trip after a lay-up from October 1993 to January 1994 during which time the tanks were slack and the vessel was unheated.

2.0 *Analysis*

2.1 *Fuel Contamination*

When the "GYPSY LASS" was laid up, the fuel tanks were slack and the vessel was unheated, a combination of circumstances which is conducive to condensation. This is considered the most likely cause of the water in the fuel. With the adverse weather on the day of the grounding, the vessel was moving heavily in the rough seas; this action would have stirred up any sediment in the fuel tanks. Having started the trip with a full load of fuel, the vessel had already initially consumed fuel from the forward engine-room tanks. At the time the contamination was discovered, the vessel was consuming fuel from the engine-room tanks which was being run down from the after tanks to offset the increase in the after draught as the fish catch was brought on board. Although the skipper shut off the fuel supply from the after tanks on discovering the contamination, there was a good possibility that all the tanks were now contaminated to some extent. The after tanks were suspected to be the source of the contamination.

2.2 *Precautionary Filter Change*

Dirt and water in the fuel filters had prompted the skipper of the "GYPSY LASS" to stop and change the filters twice on the inward passage. As the vessel approached the harbour entrance, the skipper feared that the main engine might fail while entering port and decided to change the filters as a precautionary measure. Given the weather conditions and the proximity to the shore where the filter change was to take place, it would have been prudent for the skipper of the "GYPSY LASS" to have asked the "ROYAL PRIDE" to stand by him while he completed the filter change. The two vessels had been fishing in each other's company and both were to lay over in Edith Harbour. When she was called to assist, the "ROYAL PRIDE" was on the scene in 20 minutes, but the "GYPSY LASS" had already been carried into shallow water.

3.0 *Conclusions*

3.1 *Findings*

1. The fuel supply on the "GYPSY LASS" was found to be contaminated with water and sediment on the inward passage to Edith Harbour.
2. With no uncontaminated fuel tank to draw on, the skipper decided to change fuel filters before entering the harbour.
3. The main engine could not be restarted after the vessel had been stopped close off a lee shore to effect the change of filters.
4. As the "GYPSY LASS" was carried toward shallow water, the only assistance close at hand, the "ROYAL PRIDE", had gone ahead into Edith Harbour.
5. When the "ROYAL PRIDE" was summoned and arrived to assist, the "GYPSY LASS" had already been carried into shallow water.
6. While the "ROYAL PRIDE" stood by, her main propulsion was fouled and disabled by kelp and she also grounded.
7. When the Fast Rescue Craft "POINT HENRY NO. 2" arrived to assist, the situation of the two grounded vessels was such that only a partial abandonment of the "ROYAL PRIDE" could be effected.
8. While attempting to manoeuvre in the restricted area of the grounded vessels, the "POINT HENRY NO. 2" was swamped and had to be beached.
9. Because of the proximity of the incident to Alaskan waters, RCC tasked a closer USCG helicopter, which was equipped for night rescue, to recover the nine stranded persons.
10. All the crew members from the two stricken fishing vessels had donned immersion suits and were safely rescued.

3.2 *Causes*

While close inshore in adverse environmental conditions, the "GYPSY LASS" grounded after her main engine failed to restart because no measures had been taken in anticipation of the main engine not restarting. The "ROYAL PRIDE" grounded because she entered an area of

heavy seaweed and lost propulsion when kelp was drawn into her Kort nozzle. The Fast Rescue Craft "POINT HENRY NO. 2" was swamped while attempting to manoeuvre to effect a rescue in adverse operating conditions.

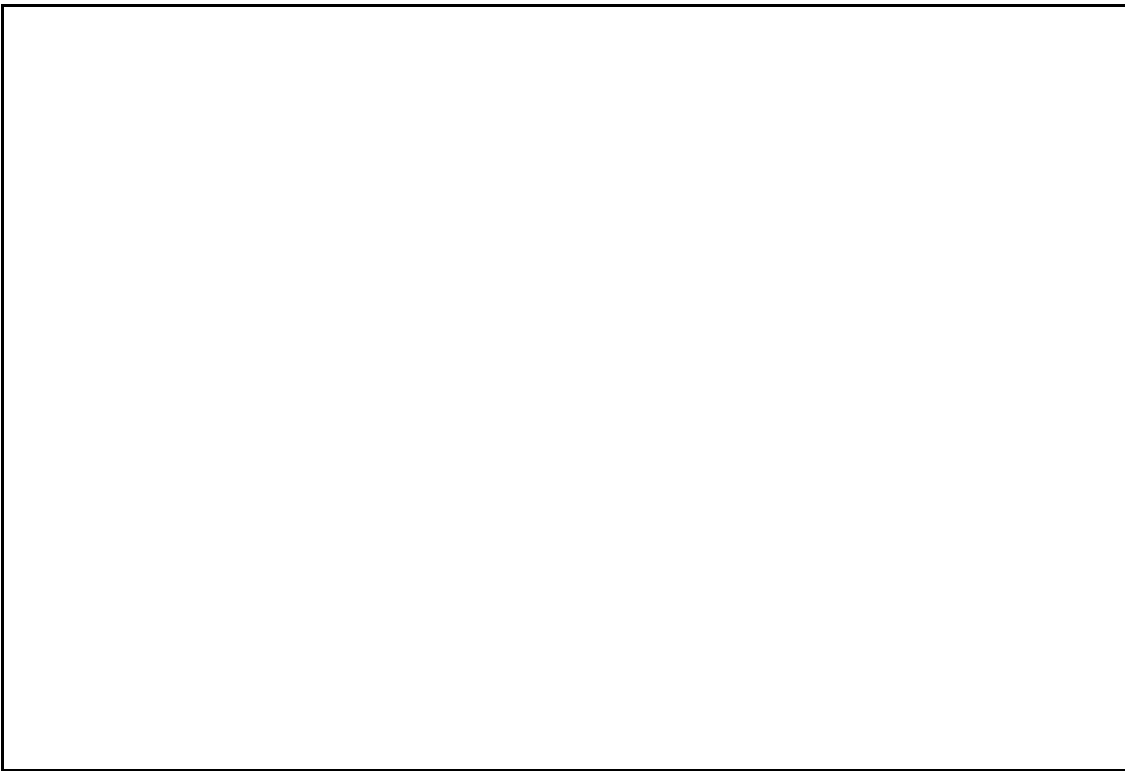
4.0 *Safety Action*

The Board has no marine safety recommendations to issue at this time.

This report concludes the Transportation Safety Board's investigation into this occurrence. Consequently, the Board, consisting of Chairperson John W. Stants, and members Zita Brunet and Hugh MacNeil, authorized the release of this report on 28 August 1995.

Appendix A - Sketch of the Occurrence Area

Appendix B - Photographs





Appendix C - Glossary

A	aft
B.C.	British Columbia
beach(ing)	Intentionally putting a vessel (partly) aground to prevent her sinking in deep water.
BHP	brake horsepower
C	Celsius
CCG	Canadian Coast Guard
CCGC	Canadian Coast Guard cutter
CGRS	Coast Guard Radio Station
CHS	Canadian Hydrographic Service
F	forward
FRC	Fast Rescue Craft
freeboard	The height of the gunwale, weather or freeboard deck edge above the sea surface.
HP	horsepower
IMO	International Maritime Organization
Kort nozzle	Cylindrical casing fitted around propeller to increase thrust.
kW	kilowatt(s)
m	metre(s)
PST	Pacific standard time
RCC	Rescue Co-ordination Centre
SAR	Search and Rescue
SI	International System (of units)
trawl doors	Otter board, constructed of wood or steel, used in fishing to keep the net or trawl open.
TSB	Transportation Safety Board of Canada
U.S.	United States
USCG	United States Coast Guard
UTC	Coordinated Universal Time
VHF R/T	very high frequency radiotelephone
°	degree(s)

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