



Transportation
Safety Board
of Canada

Bureau de la sécurité
des transports
du Canada



**Fire and sinking of the
Fishing Vessel *Frederike. C-2*
Rimouski (QC), Canada
28 April 2015**

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Transportation Safety Board of Canada
09 February 2017



Presentation outline

- Summary
- Particulars of vessel
- Events leading to the sinking
- Findings
- Safety actions taken

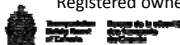
Frederike. C-2 (Source: Fabienne Gingras)



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Particulars of vessel

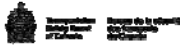
Name of vessel	<i>Frederike. C-2</i>
Official number	822200
Port of registry	Gaspé, Québec
Flag	Canada
Type	Fishing vessel, trap
Material	Fibreglass over wood (oak and veneer)
Gross tonnage	23.13
Length O.A.	15.15 m
Draught at time of occurrence	1.47 m
Built	2001, Gerald Duguay's Fiberglass Boat Builders Ltd., Cap-Pelé, New Brunswick, Canada
Propulsion	1 high-speed 4-stroke diesel engine (336 kW) driving a single fixed-pitch propeller through a reversing reduction gearbox
Cargo	210 plastic containers (weighing approximately 1428 kg); no catch on board
Crew	4
Registered owner/ manager	Maliseet of Viger First Nation, Cacouna, Quebec, Canada



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Events leading to the sinking

- The fire broke out at about 0230.
- The master decided to return to Rimouski and called his brother (vessel Marie-Karine D.) for assistance.
- The crew attempted to flood the fire.
- ~ 0300: crew released CO2 and abandoned the vessel on raft.
- Vessel burned and sank.



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Findings as to causes and contributing factors

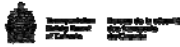
1. A fire broke out in the engine compartment (failure in the generator engine?)
2. Crew unable to firefight the fire (smoke).
3. Crew evacuates onto the main deck.



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Findings as to causes and contributing factors (cont'd)

4. Flooding the engine compartment was unsuccessful.
5. CO2 released ~30 minutes after the first signs of fire, without preliminary steps to prepare compartment.
A second charge of carbon dioxide was available but not used.
6. The vessel burned to the waterline and sank.



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Findings as to risk

(Summary)

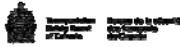
1. If the authorized representative of a vessel does not ensure proper familiarization and training [...] the response to an emergency may be inefficient.
2. Without formalized emergency duties, familiarization and drills, the response to an emergency may be inefficient.



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Findings as to risk (cont'd)

3. Without communications such as VHF and EPIRBs, SAR response may be less effective.
4. Without familiarization and proper training of firefighting equipment on board, the crew may not be able to respond to emergencies promptly and effectively.



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Other findings

(Summary)

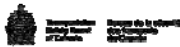
1. Repairs performed on the vessel were not reported to TCMSS or verified for compliance to standards.
2. Two main engine failures were not reported to TCMSS and engines were not verified for compliance with regulatory requirements.



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Other findings (cont'd)

3. Master's certificate had expired 2 years before the occurrence.
4. Alarm system was repaired but the alarm did not work.



Other findings (cont'd)

5. No portable VHF, cell phone only.
6. No familiarization and training manual on board. No further action was taken by TCMSS in this matter, and the vessel was allowed to continue operating.



Safety Actions taken

TCMSS

Added **compliance deadlines** in relation to the familiarization and training manual. Failure to comply with this notice by the deadline will result in **administrative monetary penalties**, pursuant to the Administrative Monetary Penalties and Notices (CSA 2001) Regulations.

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