



FINDINGS OF CONCERN

Sector Anchorage

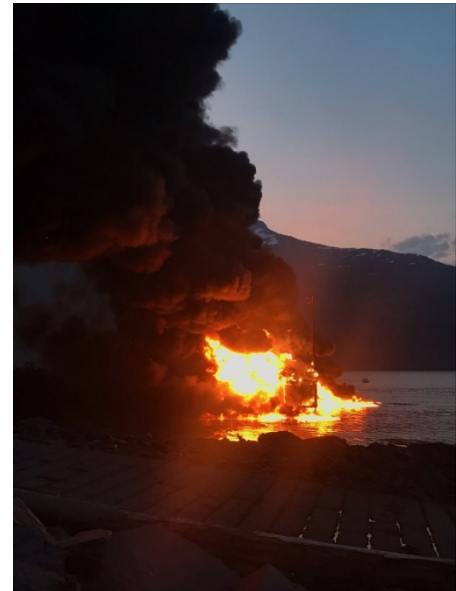
December 2, 2020
Anchorage, AK

Findings of Concern 010 - 20

CARRIAGE OF GASOLINE BELOW DECK

Purpose: The U.S. Coast Guard issues findings of concern to disseminate information related to unsafe conditions that were identified as causal factors in a casualty and could contribute to future incidents. Findings of concern are intended to educate the public, state, or local agencies about the conditions discovered so they may address the findings with an appropriate voluntary action or highlight existing applicable company policies or state/local regulations.

The Incident: A 99-foot commercial fishing vessel was tendering salmon inside Prince William Sound, Alaska. There was approximately 1,000 gallons of gasoline stored in an independent tank below deck. The tank was fitted with a pressure vacuum valve, but no other explosive atmosphere precautions were met. The tank subsequently exploded with extreme force, igniting everything on board. One crew member died as a result of the casualty.



Contributing Factors and Analysis: The marine casualty investigation found that the vessel was not designed or outfitted to safely carry gasoline below deck. The electrical equipment located in the storage space was not intended for use in a hazardous location and the ventilation system did not provide adequate exhaust of accumulated vapors.

Findings of Concern: Coast Guard investigators identified the following recommended actions for operators of similar vessels (not required to meet 46 Code of Federal Regulations, Part 105) to consider in order to reduce the likelihood of recurrence if gasoline or other flammable liquids must be carried in independent containers:

- Ensure storage containers are designed for flammable liquids.
- Store containers in open deck areas a safe distance away from potential ignition sources.
- Use a storage rack capable of easy jettison in the event of an emergency.
- If carriage must be below deck, install flammable vapor detection in accordance with manufacturer instructions that meet Underwriter Laboratory Standard 1110.
- Prevent accumulation of flammable vapors with ventilation for hazardous locations.

Closing: These findings of concern are provided for informational purpose only and do not relieve any domestic or international safety, operational, or material requirements. For any questions or comments please contact Sector Anchorage Investigations Division by phone at (907) 428-4173 or by email at WesternAlaskaIO@uscg.mil.