



UNITED STATES COAST GUARD

U.S. Department of Homeland Security

MARINE SAFETY ALERT

Inspections and Compliance Directorate

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Safety Alert 2-18

Operational Risk Management and Planning is Essential to Safe Towing and Salvage Operations

This safety alert reminds commercial towing and salvage operators to assess operational risks at all times and continually reassess risks based on weather, equipment, experience, and evolving conditions on-scene. It further reminds all those on the water to use appropriate Personal Protective Equipment (PPE) for prevailing weather conditions. Recently, a commercial towboat Captain got underway for a nighttime, 10 to 12 hour, dock-to-dock tow during a period when the State had declared a State of Emergency for an approaching winter storm and the National Weather Service had issued a Winter Storm Warning and Gale Warning for the entire coastal region. Ultimately, the Captain perished at sea after misinterpreting environmental factors that should have indicated the extraordinary operational risks involved and compelled a different course of action.



Figure 1: Salvage operations successfully recovered the vessel

Prior to the tow's departure, the towed vessel was in stable condition at its moored location with no imminent threat or change in condition to compel a towing operation. However, the towboat Captain and company management decided to conduct the tow based on observed stable weather conditions and an assessment that the tow could be completed before the onset of heavy weather. They further assessed that the protected route, comprised of inland waterways, would minimize the impact of any weather encountered. The Captain was the sole operator aboard the towboat and a hired deckhand was onboard the towed vessel monitoring its status.

Around 6:00 PM, the towboat hooked up to its tow and got underway. Within a few hours, the weather conditions deteriorated to near white out conditions with a visibility of less than a quarter mile. The air temperature was approximately 28 degrees Fahrenheit (F), water temperature was about 39 degrees F, and sustained winds were from the NW at roughly 20-30 knots with periodic gust to 35 knots. The 21-foot towing vessel subsequently capsized due to heavy seas and wind at about 1:30 AM the next morning. The deckhand onboard the towed vessel saw the Captain enter the water but lost sight of him due to darkness, the sea state, and blizzard conditions. Despite exhaustive Coast Guard search and rescue efforts, the Captain could not be immediately located. He was found deceased two days later and was not wearing a personal floatation device (PFD).



Figure 2: Recovered inflatable Type V PFDs from the sunken towing vessel

Investigators determined the towing company's preferred PPE for use by their Captains were Adult [Universal Inflatable CO2 activated Type-V PFDs](#). In the cabin of the salvaged vessel were five Type V PFDs found in varying states of inflation due to submersion. A well-known manufacturer produced all of the PFDs, some as recently as 2017, and each had their proper Coast Guard approval numbers. One PFD was fully inflated, three were partially inflated and one was uninflated as shown in Figure 2. Each PFD had a label sewn on it with the notation “**DO NOT USE BELOW FREEZING REFER TO OWNER’S MANUAL FOR MORE INFORMATION**” as shown in Figure 3. The owner’s manual for the PFDs had specific instructions for what to do in below-freezing temperatures. It called for partial pre-inflation and / or topping off after auto-inflation by using the oral inflator. It also suggested the use of other types of PFDs when operating in cooler water to delay the onset of [hypothermia](#).

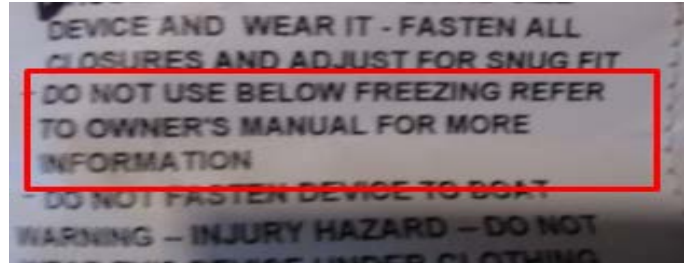


Figure 3: Manufacturer's warning on Type V PFD

As a result of this casualty, the Coast Guard **strongly recommends** the following to commercial salvors, towboat operators, and others who work on the water:

HEED INCLEMENT WEATHER WARNINGS

- Obtain and monitor [weather forecasts](#) and [marine weather forecasts](#) for your area of operations.
- Evaluate the need to get underway in forecasted hazardous weather.
- Consider safe havens and contingency plans along your route should hazardous weather arrive unexpectedly.
- Delay tows or salvage operations as necessary to prevent putting yourself at risk.

WEAR YOUR LIFEJACKET

- Obtain the best PFD suited for your operation and environment.
- Read the PFD manual and equipment labels.
- Follow all instructions including PFD maintenance and inspection recommendations.
- For cold water operations consider using an approved [flotation coat](#) or [deck-suit style PFD](#).

TOWING AND SALVAGE ORGANIZATIONS should implement policies, procedures, and training to address the issues identified in this alert including proper PFD selection and usage. Furthermore, risk management tools and decision-making criteria should be adopted and exercised to safeguard operations.

This safety alert is provided for informational purposes only and does not relieve any domestic or international safety, operational or material requirement. Developed by Investigations Division of Coast Guard Sector Wilmington North Carolina. Distributed by the Office of Investigations and Casualty Analysis, Washington DC. Questions may be sent to HQS-PF-fldr-CG-INV@uscg.mil.