

UNINSPECTED PASSENGER VESSEL WICKLIFFE CREWBOAT (O.N. 1221644), CREWMEMBER LOSS OF LIFE IN THE OHIO RIVER NEAR MILE MARKER 981 IN CAIRO, KY ON MARCH 03, 2022



U.S. Department of Homeland Security

United States Coast Guard



Commandant United States Coast Guard US Coast Guard Stop 7501 2703 Martin Luther King Jr. Ave. SE Washington, DC 20593-7501 Staff Symbol: CG-INV Phone: (202) 372-1032 E-mail: <u>CG-INV1@uscg.mil</u>

16732/IIA #7406146 24 February 2025

LOSS OF LIFE ONBOARD THE UNINSPECTED PASSENGER VESSEL WICKLIFFE CREWBOAT (O.N. 1221644) ON THE OHIO RIVER AT MILE MARKER 981, NEAR CAIRO, KENTUCKY ON MARCH 3, 2022

ACTION BY THE COMMANDANT

The record and the report of the investigation (ROI) completed for the subject casualty have been reviewed. The record and the report, including the findings of fact, analysis, conclusions, and recommendations are approved subject to the following comments. This marine casualty investigation is closed.

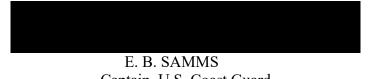
ACTION ON ADMINISTRATIVE RECOMMENDATIONS

Recommendation 1: It is recommended that the United States Coast Guard Marine Safety Unit (MSU) Paducah engage Economy Boat Store/PTL Marine to conduct a review of their operational and training procedures for crewboat operations to generate procedures for safe operations and good marine practices identified in paragraphs 6.1.1.1. and 6.1.2.1. of the ROI.

<u>Action</u>: I concur with this recommendation. I note that the Coast Guard MSU Paducah Officer in Charge, Marine Inspection (OCMI) has already engaged with Economy Boat Store/PTL Marine to review their safety procedures and policies. As a result, the company added a safety addendum to their operational and training procedures prohibiting their crew boats from attaching to towing vessels while they are underway.

<u>Recommendation 2</u>: It is recommended that the Officer in Charge, Marine Inspection (OCMI) initiate an investigation involving potential allegations identified in paragraph 4.2.6. of the ROI in accordance with 46 Code of Federal Regulations (CFR), Subpart 26.20-1.

Action: I concur with this recommendation. I note that the Coast Guard MSU Paducah OCMI is conducting an administrative enforcement investigation against Economy Boat Store/PTL Marine for operating an uninspected passenger vessel without a properly licensed master.



Captain, U.S. Coast Guard Chief, Office of Investigations & Casualty Analysis (CG-INV)

U.S. Department of Homeland Security

United States Coast Guard



Commander Eighth Coast Guard District Hale Boggs Federal Bldg. 500 Poydras Street New Orleans, LA 70130 Staff Symbol: dp Phone: (504) 671-2087

16732 NOV 27 2024

UNINSPECTED PASSENGER VESSEL WICKLIFFE CREWBOAT (O.N. 1221644), CREWMEMBER LOSS OF LIFE IN THE OHIO RIVER NEAR MILE MARKER 981 IN CAIRO, KY ON MARCH 03, 2022.

ENDORSEMENT BY THE COMMANDER, EIGHTH COAST GUARD DISTRICT

The record and the report of the investigation convened for the subject casualty have been reviewed. The record and the report, including the findings of fact, analysis, conclusions, and recommendations are approved. It is recommended that this marine casualty investigation be closed.

COMMENTS ON THE REPORT

- 1. The loss of the operator was a tragic and preventable accident. I offer my sincere condolences to the family and friends of the mariner who lost his life.
- 2. The investigation and report contain valuable information which can be used to address the factors that contributed to this marine casualty and prevent similar incidents from occurring in the future.



Commander, U.S. Coast Guard Chief of Prevention, Acting Eighth Coast Guard District By Direction U.S. Department of Homeland Security United States Coast Guard



Commanding Officer United States Coast Guard Marine Safety Unit Paducah 225 Tully Street Paducah, KY 42003 Staff Symbol: SIO Phone: (270) 442-1633

16732 June 27, 2023

UNINSPECTED PASSENGER VESSEL WICKLIFFE CREWBOAT (O.N. 1221644), CREWMEMBER LOSS OF LIFE IN THE OHIO RIVER NEAR MILE MARKER 981 IN CAIRO, KY ON MARCH 03, 2022

ENDORSEMENT BY THE OFFICER IN CHARGE, MARINE INSPECTION

The record and the report of the investigation convened for the subject casualty have been reviewed. The record and the report, including the findings of fact, analysis, conclusions, and recommendations are approved. It is recommended that this marine casualty investigation be closed.

COMMENTS ON THE REPORT

<u>Recommendation</u> There were no proposed actions to add new or amend existing U.S. laws or regulations, international requirements, industry standards, or U.S. Coast guard policies and procedures as part of this investigation

<u>Administrative Recommendation 1.</u> It is recommended that the U.S. Coast Guard Marine Safety Unit Paducah engage Economy Boat Store/PTL Marine to conduct a review of their operational and training procedures for crewboat operations to generate procedures for safe operations and good marine practices.

<u>Administrative Recommendation 2.</u> It is recommended that the U.S. Coast Guard Marine Safety Unit Paducah initiate an investigation involving potential allegations of operating without a valid Coast Guard license or Merchant Mariner Credential.

Administrative Recommendation 3. That the investigation be closed.

Endorsement: I concur with these recommendations.



J. J. ANDREW Commander Officer in Charge, Marine Inspection U.S. Coast Guard By Direction

Enclosure: (1) Investigating Officer's Report 16732 dated May 12, 2023

U.S. Department of Homeland Security

United States Coast Guard

Commandant United States Coast Guard Marine Safety Unit Paducah 225 Tully Street Paducah, KY 42003 Staff Symbol: SIO Phone: (270) 442-1633

16732 May 12, 2023

UNINSPECTED PASSENGER VESSEL WICKLIFFE CREWBOAT (O.N. 1221644), CREWMEMBER LOSS OF LIFE IN THE OHIO RIVER NEAR MILE MARKER 981 IN CAIRO, KY ON MARCH 03, 2022

EXECUTIVE SUMMARY

On March 3, 2022, at approximately 1508 Central Standard Time (CST), the towing vessel LUKE BURTON (O.N. 547881) was upbound at Mile Marker (MM) 981 Ohio River along the left descending bank. The LUKE BURTON was not engaged in commercial towing during the transit. The vessel WICKLIFFE CREWBOAT (O.N. 1221644) came along the port side of the towing vessel to drop a contractor off for a line inspection. The crew boat tied off to a cavel (cleat) on the towing vessel via one line. Deckhand 1, the operator of the WICKLIFFE CREWBOAT stayed on the vessel while the contactor boarded the towing vessel to conduct the inspection. While tied off to the towing vessel, the stern of the crew boat began to submerge and the line holding the crew boat broke. Subsequently, the crew boat capsized, causing Deckhand 1 to enter the water. The crew of the towing vessel began man overboard procedures and the master of the LUKE BURTON made the initial notification to the Coast Guard. They were not able to locate or recover Deckhand 1. The overturned crew boat was towed to shore before being righted.

Local assets and authorities continued to search the area for several weeks, but no evidence of the mariner was found. A death certificate was ordered by the Ballard County District Court ruling Deckhand 1 deceased by the coroner.

Through its investigation the Coast Guard determined the initiating event for this casualty was the stern deck of the crew boat becoming awash. Subsequent events were the parting of the line connecting the crew boat to the towing vessel, the crew boat capsizing, Deckhand 1 entered the water as a result and was later presumed to have drowned. Causal factors contributing to this casualty include: 1) Lack of Company Policies or Procedures for Tying to Vessels While Underway, 2) Lack of Company Oversight to Ensure Compliance of Organizational Policies, 3) Tying Alongside an Underway Vessel without a Tow, 4) Failure to Recognize High Water Conditions, 5) Failure to Take Line Inspector to Fleeting Area to Meet Towing Vessel, 6) Failure to Have a Licensed Crewmember Operate the Vessel, 7) Failure of Deckhand 1 to Follow Organizational Policies, 8) Inadequate Deck Lines, 9) Lack of Company Policies or Procedures of Formal Boat Handling, 10) Reduced Maneuverability of Crew Boat While Tied to Another Vessel, 11) Operator of the Crew Boat Remained Inside the Cab, and 12) Failure of Deckhand 1 to Don a Lifejacket.

U.S. Department of Homeland Security

United States Coast Guard



Commandant United States Coast Guard Marine Safety Unit Paducah 225 Tully Street Paducah, KY 42003 Staff Symbol: SIO Phone: (270) 442-1633

16732 March 20, 2023

UNINSPECTED PASSENGER VESSEL WICKLIFFE CREWBOAT (O.N. 1221644), CREWMEMBER LOSS OF LIFE IN THE OHIO RIVER NEAR MILE MARKER 981 IN CAIRO, KY ON MARCH 03, 2022

INVESTIGATING OFFICER'S REPORT

1. Preliminary Statement

1.1. This marine casualty investigation was conducted and this report was submitted in accordance with Title 46, Code of Federal Regulations (CFR), Subpart 4.07, and under the authority of Title 46, United States Code (USC) Chapter 63.

1.2. No individuals, organizations, or parties were designated as a party-in-interest for this investigation in accordance with 46 CFR Subsection 4.03-10.

1.3. The Coast Guard was the lead agency for all evidence collection activities involving this investigation. Cairo Fire and Rescue, Ballard County Sheriff, and Ballard County Emergency Management assisted Coast Guard investigators with initial casualty scene response and led the search and rescue. Due to this incident involving a loss of life, the Coast Guard Investigative Service (CGIS) was notified. No other persons or organizations assisted in this investigation.

1.4. All times listed in this report are in Central Standard Time using a 24-hour format and are approximate.

2. <u>Vessel Involved in the Incident</u>



Figure 1. Photograph of WICKLIFFE CREWBOAT taken by from shipspotting.com.

on 4/25/2014 on the Mississippi River, Wickliffe, KY, obtained

Official Name:	WICKLIFFE CREWBOAT
Identification Number:	1221644
Flag:	US
Vessel Class/Type/Sub-Type	Uninspected Passenger Vessel/Crew
	Boat/6 or fewer passengers
Build Year:	2009
Gross Tonnage:	Unknown
Length:	35 feet
Beam/Width:	12 feet
Draft/Depth:	4 feet
Main/Primary Propulsion: (Configuration/System	2x 250 horse power/ Honda gasoline
Type, Ahead Horse Power)	outboards
Owner:	MERS LLC;
	Memphis, TN/USA
Operator:	MERS LLC;
	Memphis, TN/USA



Figure 2. Photograph of the towing Vessel Luke Burton taken by MarineTraffic.com.

at Granite City, IL on 12/14/2009, obtained from

Official Name:	LUKE BURTON
Identification Number:	O.N. 547881
Flag:	US
Vessel Class/Type/Sub-Type	Towing Vessel
Build Year:	1973
Gross Tonnage:	459 GT
Length:	144 feet
Beam/Width:	35 feet
Draft/Depth:	11 feet
Main/Primary Propulsion: (Configuration/System	Medium speed diesel/Diesel
Type, Ahead Horse Power)	reduction/4200 horse power
Owner:	Canal Barge;
	Belle Chasse, LA/USA
Operator:	Canal Barge;
	New Orleans, LA/USA

3. Deceased, Missing, and/or Injured Persons

Relationship to Vessel	Sex	Age	Status
Deckhand 1	Male	23	Deceased

4. Findings of Fact

4.1. The Incident:

4.1.1. On March 3, 2022, at 1450, the towing vessel LUKE BURTON was underway without a tow heading north bound on the Ohio River making approximately 4 knots against the river current.

4.1.2. On March 3, 2022, at 1500 hours, the WICKLIFFE CREWBOAT, operated by Deckhand 1, departed Economy Boat Store/PTL Marine in Wickliffe, KY to bring a Line Inspector to the towing vessel LUKE BURTON.

4.1.3. At 1505, the WICKLIFFE CREWBOAT arrived at the towing vessel LUKE BURTON traveling north bound on the Ohio River making approximately 4 knots against the river current. The crew boat was tied off to the 4th cavel on the port side of the LUKE BURTON with assistance from the towing vessels crew. The Line Inspector departed the crew boat and boarded the towing vessel to perform scheduled line inspection.

Reportedly, the "Wickliffe Crewboat" was tied of to the 4th cavel aft of the headlog as follows:

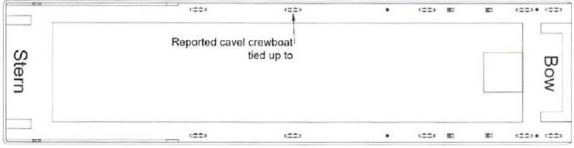


Figure 3. Top-down of the towing vessel LUKE BURTON Tie Off Diagram, obtained from the General Condition Survey completed on 3/5/2022, by

4.1.4. At approximately 1508, Deckhand 1 shut down the engines on the WICKLIFFE CREWBOAT and remained tied to the towing vessel. He communicated with Deckhand 2 back at the PTL Marine office that he was going to stay alongside the towing vessel and wait for the Line Inspector to complete his inspection.

4.1.5. At approximately 1513, a loud bang was heard by several crewmembers on the LUKE BURTON. A crewmember witnessed the WICKLIFFE CREWBOAT sinking and notified the wheelhouse. A life ring was thrown into the water near the vessel.

4.1.6. Shortly after, the line holding the WICKLIFFE CREWBOAT parted, releasing the vessel from the LUKE BURTON. The vessel then capsized off the port side of the LUKE BURTON.



Figure 4. Photograph of the WICKLIFFE CREWBOAT with engines shutdown. Taken on 3/29/2022 by the Coast Guard at Wickliffe, KY.

4.1.7. At approximately 1515, Deckhand 1 was inside the pilothouse and entered the water when the vessel capsized. The Coast Guard was notified shortly after, and the crew of the LUKE BURTON commenced man overboard procedures.

4.1.8. At 1530, assist vessels responded to the scene at MM 981 of the Ohio River. They attached lines to the shafts of the outboard motors and towed the overturned vessel upriver to a waterfront dock where a crane was used to right the crew boat. Deckhand 1 was not found inside the crew boat. A lifejacket with Deckhand 1's name stenciled on the back was discovered inside the crew boat cab. The LUKE BURTON returned to and tied off at James Marine in Wickliffe, KY.



Figure 5. Lifejacket found inside the WICKLIFFE CREWBOAT after it was righted. Taken on 3/29/2022 by the Coast Guard at Wickliffe, KY.



Figure 6. Lifejacket with initials stenciled on the back. Taken on 3/29/2022 by the Coast Guard at Wickliffe, KY.

4.1.9. Deckhand 1 was never located through search and rescue efforts. A death certificate was ordered by the Ballard County District Court. Death was recorded as occurring on March 3, 2022, in the manner of drowning due to boating accident.

4.1.10. Post-casualty chemical and alcohol testing was conducted on the master and two crew members of the LUKE BURTON in accordance with 46 CFR Subpart 4.06. All results were negative for drugs or alcohol.

4.2. Additional/Supporting Information:

4.2.1. The LUKE BURTON is a 144-foot inspected U.S. certificated towing vessel operated by Canal Barge Company. It is used to transport barges containing various cargoes throughout the Western rivers. It was always operated by a U.S. Coast Guard credentialed mariner. Canal Barge Company is a fuel customer of Pilot Thomas Logistics (PTL) Marine. On the day of the incident the vessel was underway without a tow.

4.2.2. The WICKLIFFE CREWBOAT is a 35-foot uninspected passenger vessel, that can carry 6 or less passengers. It is owned by MERS LLC and operated by PTL Marine who bought Economy Boat Store out of Wickliffe, KY. The vessel is used primarily for short trips supplying groceries, parts, and crew changes to its fuel customers. It is normally operated with a licensed operator and one deckhand. All systems were reported in operational condition prior to the incident.

4.2.3. Deckhand 1 was a non-credentialed mariner that worked on the WICKLIFFE CREWBOAT for approximately five years. He had participated in all drills required by policy, including new-hire familiarization and OTJ training in deckhand/shipboard duties, and worked under Pilot 1, a licensed mariner. Deckhand 2 worked for PTL Marine for approximately two and a half years as a tankerman and deckhand.

4.2.4. On the morning of the incident Deckhand 1 and Deckhand 2 were assigned the WICKLIFFE CREWBOAT. The normal operator Pilot 1 was assisting another job and was unavailable for the first trip of the day which was completed without incident with Deckhand 1 as the operator and Deckhand 2 as the second crewmember. When the Line Inspector arrived, he waited approximately one hour before Deckhand 1 reported to Deckhand 2 that he was going to take the line inspector out by himself. Deckhand 2 was busy completing paperwork and was unavailable to go out. It was not reported to Pilot 1, who was the supervisor to the deckhands that Deckhand 1 planned to make the trip to drop the Line Inspector off by himself.

4.2.5. PTL/Economy Boat Store Safety Management/Responsible Carrier Program policy states no unqualified person shall operate a vessel on his own and that Economy boats are manned with two-man crews, the operator and a deckhand. On the day of the incident Deckhand 1 made the service run by himself.

4.2.6. PTL Marine operated the WICKLIFFE CREWBOAT at no charge for fuel customers. If a request for services is made by a non-fuel customer, the company would charge for their services. On the day of the incident PTL Marine provided the

transportation of the Line Inspector to the towing vessel as a courtesy since they are a fuel customer. This courtesy is considered a passenger-for-hire since the condition of carriage is contingent on buying fuel from PTL Marine.

4.2.7. 46 CFR 24.10 (Uninspected Vessels) defines an uninspected passenger vessel of less than 100 gross tons; carrying not more than six passengers, including at least one passenger-for-hire. 46 CFR 24.10 (Uninspected Vessels) defines a passenger for hire as a passenger for whom consideration is contributed as a condition of carriage on the vessel, whether directly or indirectly flowing to the owner, charter, operator, agent, or any other person having an interest in the vessel. Finally, 46 CFR 26.20-1 (Uninspected Vessels) requires that if a person operates a vessel that carries one or more passengers-for-hire, he or she is required to have a valid Coast Guard license or MMC officer endorsement suitable for the vessel's route and service. Under these definitions the WICKLIFFE CREWBOAT is an Uninspected Passenger Vessel that carries one or more passengers-for-hire and requires that a person operating it to have a valid Coast Guard license.

4.2.8. It was not clear what sort of training the crew members that operated the WICKLIFFE CREWBOAT received for good marine practice, boat handling, and tying alongside another vessel while underway. PTL Marine Safety Management System/Responsible Carrier Program under Economy Boat Store had no policies that addressed tying alongside to vessels while underway with or without a tow.

4.2.9. PTL Marine/Economy Boat Store Safety Management System requires that "life vests or work jackets shall be worn at all times when exposed to any fall overboard situation". This includes on the boat or barge. Additionally, a working life vests must be worn when there is a risk of entering the water unexpectedly. Anytime a person is working for or with the Company aboard any vessel, and the individual is in any areas which may present a fall overboard situation. Deckhand 1 had his lifejacket on board the WICKLIFFE CREWBOAT on the day of the incident. It was unclear when and where he wore the lifejacket that day. By company policy he was not required to wear a lifejacket in areas aboard the vessel that did not pose a risk of entering the water. Inside the cab is a reasonable area to consider not at risk compared to working on the deck.

4.2.10. The deck line that was used to tie the boats together was from the WICKLIFFE CREWBOAT. It was 1.5-inch synthetic mooring line. There were no records of when the line was purchased or maintenance records.



Figure 7. Broken deck line from the WICKLIFFE CREWBOAT used to tie the vessels on the day of the incident. Taken on 3/29/2022 by the Coast Guard at Wickliffe, KY.

4.2.11. Weather conditions on-scene at the time of the incident were clear, with good visibility of 10 miles, winds 3 -10 knots out of the southwest, air temperature 66 degrees Fahrenheit. Water temperature was 43 degrees Fahrenheit, and current was 7 mph. High water levels were reported on the Ohio River reaching 47 feet at Cairo.

4.2.12. Post casualty assessment of both vessels showed damage from a hard collision, with the WICKLIFFE CREWBOAT suffering structural damage and the LUKE BURTON suffering superficial damage on the port side.



Figure 8. LUKE BURTON damage port side. Obtained from the General Condition Survey completed on 3/5/2022, by



Figure 9. WICKLIFFE CREW BOAT hull damage. Obtained from the General Condition Survey completed on 3/5/2022, by

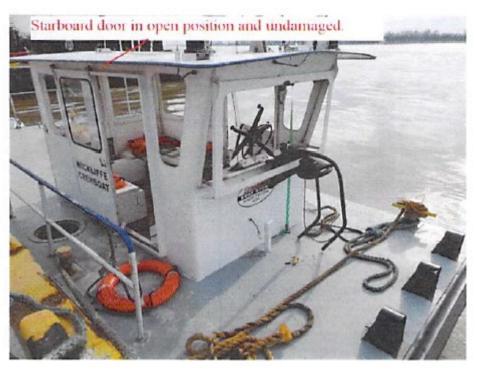


Figure 10. WICKLIFFE CREW BOAT cabin and deck. Obtained from the General Condition Survey completed on 3/5/2022, by

5. Analysis

5.1. Lack of Company Policies or Procedures for Tying to Vessels While Underway.

PTL Marine/Economy Boat Store had no written policy or procedures for tying alongside

another vessel during operations. No law or regulation required Economy Boat Stores to have these policies and no previous adverse events prompted Economy Boat Stores to consider making these policies. The crewmembers had no means of reference or policy to refer to with various river conditions. Deckhand 1 may not have the required knowledge of safe and unsafe conditions and assumed it was safe to tie to the vessel while underway due to lack of guidance. If there were company policies or procedures for tying alongside a vessel underway using good marine practice this may have prevented the stern of the vessel to become awash.

5.2. Lack of Company Oversight to Ensure Compliance of Organizational Policies. PTL Marine/Economy Stores requires its vessels to be manned by two crew members, a licensed operator, and a tankerman/deckhand. On the day of the incident Deckhand 1 was the operator and the only crewmember on board for the service run. He stated to Deckhand 2 that he was going to take the Line Inspector out himself and did not request a second crewmember. Deckhand 2 was completing work and was unavailable to go out. It is possible that since the crew boat was not an inspected vessel there was less importance placed by management and the crew to always operate the vessel with two crew members. The crew boat may have seemed less of an operational risk to the management and allowed a culture of leniency with the company policies regarding the crew boat. One crewmember operating the WICKLIFFE CREWBOAT was unable to identify that tying a single line was unsafe and that there were other options for safely getting the Line Handler onboard the towing vessel. If the company had better management and oversight to ensure that policies in place had been followed it is possible different decisions would have been made that day with a two-man crew and additional lines may have been placed or the Line Handler would have been dropped off and the crew boat would have remained in gear preventing the stern from becoming awash.

5.3. Tying Alongside an Underway Towing Vessel in Unsafe Conditions. The LUKE BURTON was underway without any barges in tow. In this condition strong forces of the river are moving along both sides of the vessel as it travels against the current. When tied to the side of the vessel as the WICKLIFFE CREWBOAT was, there is no protection from prevailing conditions. It is known in the industry that tying to a towing vessel without the protection of a tow on the front is more dangerous than tying to a vessel with a tow. River conditions on the day of the incident were reported to be 6 knot currents. The combined speed of the towing vessel underway and river current would have amounted to approximately 14 knots. If the towing vessel had a tow, it would have created safer slack water conditions by taking the head of the currents and lessening the forces the vessel tied alongside would be subjected to. Deckhand 1 choose to tie alongside a towing vessel without a tow. This decision put the crew boat and themselves in a hazardous condition with the prevailing conditions of high water and strong currents. If Deckhand 1 had not chosen to tie alongside the towing vessel but instead drop the line inspector off and continued to stay under way this may have prevented the stern deck becoming awash in the first place.

5.4. Failure to Recognize High Water Conditions. The Ohio River was in a period of high water, measuring approximately 7 feet above the flood stage, recorded at approximately 47 feet at the Cairo Illinois River gage and the river current was approximately 6 knots. In combination with the vessel speed the river flow would have amounted to approximately 14 knots. During high water currents can become unpredictable and stronger than typically

encountered during typical river conditions. The river conditions on the day of the incident put excessive forces on the crew boat and the stern of the vessel became awash. Deckhand 1 may not have recognized the hazards of the river conditions that day. He may have performed this operation before in similar river conditions and was comfortable operating the crew boat in those conditions. If Deckhand had properly recognized the hazards of the river conditions, he may not have taken the crew boat out and found another way to safely get the line inspector on the towing vessel. The crew boat would not have been subjected to the stronger forces and the vessel stern may not have been dipping allowing the deck to become awash.

5.5. Failure to Take Line Inspector to Fleeting Area to Meet Towing Vessel. The LUKE BURTON was underway heading to a fleeting area within the area. Deckhand 1, the operator of crew boat made the decision to get the line inspector onto the towing vessel while underway instead of waiting for the towing vessel to get to the fleeting area where they would be tied in. It is likely that this practice to drop off crew changes and other personal to vessels underway was a common practice and the operator did not think there was any danger in continuing to do this. It is safer to meet a towing vessel at a fleeting area where the vessel is tied to barges and is stationary compared to trying to complete the operation of dropping off personnel while underway. Had the line inspector been dropped off at the towing vessel in a fleeting area instead of while underway the crew boat would not have been alongside the towing vessel exposed to heavy river conditions.

5.6. Failure to Have a Licensed Crewmember Operate the Vessel. PTL Marine/Economy Boat Stores requires its vessels to be manned by two crew members, a licensed operator, and a tankerman/deckhand. On the day of the incident, Deckhand 1 was the operator and the only crew member on board for the service run. The crew boat may have seemed less of an operational risk to the management and allowed a culture of leniency with the company policies regarding the crew boat. By not enforcing policies a culture in the workplace of operating the crew boat with only one crew member was enabled. It is possible that this also promoted other failures to follow policy while operating the crew boat since the company nor management put significant repercussions in the past for not following the policies. Not having a licensed operator and a deckhand on board reduced the knowledge and formal training a licensed operator would receive. When the vessels stern began to drop allowing water to wash over the deck, one unlicensed crewmember may not have had enough experience to know to add additional lines or take additional actions to prevent this from happening for the current river conditions. If the policies in place had been followed it is possible different decisions would have been made the day of the incident with a two-man crew, one being licensed, to prevent the crew boat from the hazard of the stern being awash.

5.7. Failure of Deckhand 1 to Follow Organizational Policies. PTL Marine/Economy Boat Stores requires its vessels to be manned by two crew members, a licensed operator and a tankerman/deckhand. On the day of the incident Deckhand 1 was the operator and the only crewmember on board for the service run. Deckhand 1 chose to not wait for another crew member to operate the vessel and told the dispatch he was going out. Deckhand 1 may have felt pressure to get the line handler out to the boat and felt it was worth going against company policy to get the job done. The company did not enforce its own policy when crew members operated the crew boat with only one crew member. It is possible that since the

crew boat was not an inspected vessel there was less importance placed by management and the crew to always operate the vessel with two crew members. The crew boat may have seemed less of an operational risk to the crew and allowed a culture of leniency with the company policies regarding the crew boat. If the policies in place had been followed by Deckhand 1, it is possible that the unsafe condition would have been recognized or mitigated with a two-man crew. An additional senior crew member on the vessel that day may have prevented the crew boat from capsizing.

5.8. Inadequate Deck Lines. There was only one line tying the vessels together and once the crew boat began to become unstable against the side of the towing vessel this one line was not adequate to help control the rolling of the crew boat in the current river conditions. After the stern became awash the line parted soon after. Deckhand 1 most likely thought one line was adequate to keep the crew boat stable while alongside the towing vessel. Deckhand 1 may have performed this operation many times in the past without anything bad happening and thought it would be sufficient. Once the vessel began being unstable it is possible there was not enough time to add additional lines before the deck line parted. The line was not strong enough to take the full weight of the vessel while tied underway in the current river conditions. It is reasonable to assume that if Deckhand 1 had added additional lines when tying alongside the towing vessel, this may have provided adequate stability, and the stern deck may not have become awash and prevented the line from breaking.

5.9. Lack of Company Policies or Procedures of Formal Boat Handling. There were no written policies that covered formal boat handling training for the crewmembers. It is not known what training the operators received as most of the training was conducted as on-the-job training. There were no details on how to handle a boat while underway tied to another vessel or how to accomplish this task and the risks involved. Economy Boat Stores/ likely believed their policies were adequate because there had been no past accidents that would drive the need for policy changes. Without policy, nothing required the operator to make necessary adjustments or procedures to follow for higher risk operations. Policy may have resulted in adjusted boat handling to avoid dangerous situations that put the crew boat as risk in prevailing conditions and may have prevented the vessel from capsizing if different methods were utilized.

5.10. Reduced Maneuverability While Tied to Another Vessel. The vessel was unable to maneuver away from the LUKE BURTON when the river conditions began placing excessive strain on the vessel due to it being tied to the vessel while underway and the engines being turned off. Because of the increased risk of being tied to a vessel underway maneuverability is restricted and the vessel is unable to adjust or get out of the changing river conditions. Had the crew boat not been tied to another vessel with the engines shut down when the deck line broke it is possible that Deckhand 1 would have been able to maneuver the vessel safely away from the towing vessel LUKE BURTON or out of the river currents and may have prevented the vessel from capsizing.

5.11. Operator of the Crew Boat Remained Inside the Cab. Deckhand 1 was seen inside the cab of the WICKLIFFE CREWBOAT by crew members of the LUKE BURTON after dropping off the Line Inspector and tying the crew boat to the towing vessel. He likely stayed inside the cab to remain at the controls for the vessel and because it is considered safer inside

the cab compared to out on deck. Being inside the cab, even with the door open when the crew boat capsized may have made any attempts to exit the cab extremely difficult. If Deckhand 1 was out on deck, he may have been able to jump onto the towing vessel easily before the crew boat capsized.

5.12. Failure of Deckhand 1 to Don a Lifejacket. Deckhand 1's lifejacket was found inside the cab zipped up on the WICKLIFFE CREWBOAT once the vessel was righted. He had been trained on proper use of personal protective equipment. It was a U.S. Coast Guard approved Type-I size Adult Large/XL with the adjustment straps extended all the way making it as large as possible. The Type-I is designed to turn most unconscious wearers faceup and to the surface of the water preventing drowning. There was not conclusive evidence that the operator was wearing a lifejacket before the vessel capsized. A witness stated he did not see Deckhand 1 wearing a lifejacket while inside the cab, while others stated he was wearing it, but it was unzipped while inside the cab. The lifejacket was found zipped up and fully extended inside the cab of the crew boat after the incident. It is possible the lifejacket was on and slipped off Deckhand 1 during the vessel capsizing into the water. It is also possible Deckhand 1 was not wearing a lifejacket while inside the cab. It is only required by Economy Boat Stores that crewmembers wear a life jacket fully fitted and secured when there is a risk of falling overboard or conducting deck operations. Deckhand 1 was inside the cab prior to the vessel capsizing, it is good marine practice not to wear a lifejacket while inside the vessel. Deckhand 1 was not out on the deck but was waiting inside the cab of the crew boat and may have taken off the lifejacket and felt there was no a risk of falling into the water while he was inside the cab. If he was not wearing a lifejacket, Deckhand 1 likely did not have enough time to don his lifejacket before entering the water since the vessel capsized very quickly.

6. Conclusions

6.1. Determination of Cause:

6.1.1. The initiating event for this casualty occurred when the stern deck of the WICKLIFFE CREW BOAT became awash. The causal factors leading to this event were:

6.1.1.1. There were no written company policies and procedures to guide crewmembers when tied to another vessel while underway.

6.1.1.2. Deckhand 1 failed to follow company policies when operating the WICKLIFFE CREWBOAT.

6.1.1.3. It is especially hazardous to tie alongside a towing vessel that does not have a tow in front.

6.1.1.4. High water levels created hazardous conditions.

6.1.1.5. Failure to perform safer operations such as dropping off the inspector to the towing vessel in a fleeting area.

6.1.1.6. There was not a properly licensed crewmember operating the crew boat.

6.1.1.7. Deckhand 1 did not follow the required two-person requirement while operating the vessel.

6.1.2. As a result of the stern deck becoming awash the deck line connecting the crew boat to the towing vessel parted resulting in the first subsequent event. The causal factors leading to this event were:

6.1.2.1. Additional deck lines were not added to keep the crew boat stable when it began to experience rough river conditions.

6.1.3. The broken deck line caused the vessel to be subject to the prevailing river conditions, leading to the second subsequent event of the vessel capsizing. The causal factors leading to this event were:

6.1.2.2. A lack of company written policies or procedures for formal boat handling

6.1.3.2. The crew boat had reduced maneuverability because it was tied to another vessel while underway.

6.1.4. After the vessel capsized Deckhand 1 entered the water in the third subsequent event. The causal factor leading to this event was:

6.1.4.1. Deckhand 1 was inside the cab of the crew boat and not out on deck where it may have been easier to get off the crew boat before it capsized.

6.1.5. As a result of Deckhand entering the water, he was unable to be located, and was determined to have died from drowning. The final subsequent event. Causal factor leading to this event were:

6.1.5.1. Deckhand 1 was unable to don a lifejacket before he entered the water, or the lifejacket was not properly fitted and came off as he entered the water.

6.1 Evidence of Act(s) or Violation(s) of Law by Any Coast Guard Credentialed Mariner Subject to Action Under 46 USC Chapter 77: There were no acts of misconduct, incompetence, negligence, unskillfulness, or violations of law by a credentialed mariner identified as part of this investigation.

6.2. Evidence of Act(s) or Violation(s) of Law by U.S. Coast Guard Personnel, or any other person: There were no potential acts of misconduct, incompetence, negligence, unskillfulness, or violations of law by Coast Guard employees or any other person that contributed to this casualty.

6.3. Evidence of Act(s) Subject to Civil Penalty: This investigation identified evidence of potential acts subject to Civil Penalty. There is evidence that the marine employer was in violation of 46 CFR 15.605 by failing to provide an individual holding a license or Merchant

Mariner Credential as or equivalent to an operator of an Uninspected Passenger Vessel that carries one or more passengers-for-hire.

6.4. Evidence of Criminal Act(s): This investigation did not identify potential violations of criminal law.

6.5. Need for New or Amended U.S. Law or Regulation: This investigation did not identify any need for new or amended U.S. Law or Regulation.

6.6. Unsafe Actions or Conditions that Were Not Causal Factors:

6.6.4. The deck line that was used on the day of the incident had no records of purchase or maintenance. It is good marine practice to track and change out lines as needed to avoid wear and tear of old lines. Although the line had no records it is unclear that a new line that would meet general requirements for a small vessel would have been able to sustain the forces and tension placed on the deck line the day of the incident. It could not be concluded that the deck line used that day was somehow a contributing factor in this incident.

7. Actions Taken Since the Incident

7.1. There were no actions taken since this incident by any party in response to the casualty.

8. <u>Recommendations</u>

8.1. There were no proposed actions to add new or amend existing U.S. laws or regulations, international requirements, industry standards, or U.S. Coast Guard policies and procedures as part of this investigation.

8.2. Administrative Recommendations:

8.2.1. It is recommended that the United States Coast Guard Marine Safety Unit Paducah engage Economy Boat Store/PTL Marine to conduct a review of their operational and training procedures for crew boat operations to generate procedures for safe operations and good marine practices identified in paragraphs 6.1.1.1. and 6.1.2.1. above.

8.2.1. It is recommended that the Officer in Charge, Marine Inspections (OCMI) initiate an investigation involving potential allegations identified in paragraph 4.2.6. above in accordance with 46 CFR Subpart 26.20-1.

8.2.2. Recommend this investigation be closed.



LT, U.S. Coast Guard Investigating Officer