## BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

TOTE MARITIME ALASKA, LLC,

DOCKET TP-220513

Movant,

PUGET SOUND PILOTS,

Respondent.

## TESTIMONY OF CAPT. ERIC LOFTFIELD

## ON BEHALF OF INTERVENOR TOTE MARINE ALASKA, LLC

February 10, 2023

 What is your name and occupation as it relates to TOTE Marine Alaska, LLC? Captain Eric Bradford Loftfield. I am a ship pilot for Topsail Inc. operating as an independent contractor for TOTE Maritime Alaska, LLC ("TOTE").

2. What is the purpose of your testimony?

To explain the lower level of risk and burden in piloting Orca class vessels such as MIDNIGHT SUN and NORTH STAR as compared to vessels for which Puget Sound Pilots ("PSP") typically provides pilotage services. I provide a professional opinion on the handling, maneuverability and propulsion of TOTE's Orca Class vessels based on my many years of experience with them and other vessels.

3. Please describe your maritime background and work history.

I graduated from the U.S. Merchant Marine Academy at Kings Point NY in June 1971, with a brand new unlimited tonnage third mate's license. I spent at least six months of each of the following 52 years at sea. My license today reads "Master Self-Propelled Vessels Including Sail of Unlimited Tonnage upon Oceans and First Class Pilot of Vessels of Unlimited Tonnage upon the Inland Waters of Cook Inlet and Prince William Sound, Alaska." This is the 14<sup>th</sup> edition of my license.

I shipped out first with Woods Hole Oceanographic Institute as third mate on their research ship the "RV Chain". She was an early diesel-electric, twin screw, 2,780 HP, 214' LOA vessel. In 1975 I left WHOI, and shipped out as second mate with Interocean Management on a T-2 jumboized tanker the "SS Council Grove." She was steam-electric, single screw 7,240 HP, 633' LOA, clean product carrier under charter to MSC to deliver fuel to US military bases in the Far East. Upon my return to the "SS Council Grove" for a second tour, I sailed as chief mate.

In 1978, IOM asked me to switch to the "SS New York," a new 265,000 ton deadweight tanker. She was steam turbine, single screw, 35,000 HP, 1100' LOA very large crude oil carrier. I was promoted to Master in 1979, my first command, and stayed with her until 1985 when she was laid up. The company Bay Tankers, which was operating the "SS New York," by then transferred me to command the "TT Stuyvesant," a 225,000 ton deadweight tanker. She was also a steam turbo single screw, 38,000 HP, 1094' LOA VLCC. I stayed with her until she also was laid up in 1990.

Soon after the "TT Stuyvesant" was laid up the First Gulf War started and Interocean Management ask me to activate and sail as master of the "MV Cape Ducato," a roll-on/roll-off cargo vessel of 34,617 tons displacement from the ready reserve fleet. She was medium-speed diesel with a single variable pitch screw, 27,000 HP, 680' LOA with bow and stern thrusters. I stayed with her until IOM pulled me off in 1991, and sent me to Malaysia to activate and sail as master on the "UST Pacific," a 404,531 ton deadweight ULCC. She was steam turbine, single screw, 44,387 HP, 1188' LOA, and displaced 464,691 long tons fully loaded to a draft of 75'. She remains the largest commercial vessel ever built in the western hemisphere.

The "UST Pacific" was sold in 1995 to a company which re-registered her as foreign. Shipping was tight at that time, but IOM suggested I look at becoming a pilot for TOTE given that a position would open up soon. Since I had already qualified for unlimited pilotage for Prince William Sound while on the Valdez run with the "SS New York" and the "TT Stuyvesant," I needed only the required trips in Cook Inlet before I could sit for pilotage licensing there. At the time, TOTE was running three Ponce class vessels, and IOM was managing the crewing. I signed on as second mate on the "SS Great Land" in the summer of 1996. I got the requisite trips, and sat for and received the pilotage endorsement. I then kept sailing with TOTE as a junior officer until a pilot's slot opened up. I started piloting for TOTE in 1998 as an independent contracted riding pilot working through Topsail Inc. an Alaska Corporation.

As of today, I have piloted TOTE vessels up Cook Inlet to the Anchorage docks and then back out to sea 664 times, first their original Ponce class steam ships, and as of 2003, the new larger Orca class vessels. The Orca class vessels are roll-on/roll-off cargo vessels of 45,400 tons displacement. They are diesel/LNG-electric with twin screws and twin rudders, 60,000 HP, 839' LOA, with a design speed of 24 knots. The Orca class has a U.S. ("domestic") 35,825 gross register tonnage. This is not weight but rather a volume measurement which is used to calculate various fees.

4. In your experience what is the least maneuverable vessel you have served on? Without a doubt, the "UST Pacific" a ULCC (ultra large crude carrier).

5. What is the typical propulsion set up of ships you have been master on? Steam turbine with a single screw.

6. What kind of propulsion do the TOTE Orca Class vessels have?

Diesel/LNG-electric with twin screws and twin rudders, a level of power that is of great benefit during maneuvering.

7. Please explain diesel-electric propulsion?

The main engines turn generators producing electricity which is then used to drive the electric motors which turn the screws.

8. What is the value of having twin screw propulsion?

Better maneuverability and more "redundancy." The 4 main engines, 2 auxiliary engines, 2 propulsion motors, and twin screws make a total loss of propulsion unlikely.

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How would you describe the steering capabilities of the Orca class vessels?
Very good to excellent. It is very responsive as compared to other classes of vessels.

10. Have you served as a master on vessels of similar size to the Orca class vessels?Yes, the "MV Cape Ducato."

11. How would you describe the ship-handling and maneuverability of a similar sized vessel?

The Orca vessels respond quicker and are easier to maneuver than other vessels of similar size. They have twin screws with multiple ways to deliver power and steering. These ship design features are far superior to single screw, single engine vessels which dominate deep draft vessel designs today. The Orca Class design provides not only more control under normal operations, but also provides options to maintain control in the case of a propulsion or steering failure. These are important safety features that significantly reduce risk by greatly reducing the possibility of a total loss of either steering or propulsion compared to a typical deep draft vessel design.

12. Would you say the risk of maneuvering an Orca Class vessel is greater or less than a similar sized vessel? Why?

Less, as the Orca class vessels have a very high power to weight ratio. It makes for quicker transits, better handling and more precise maneuvering with shorter pilotage times.

13. Given the above, would you agree that the Orca class vessels are safer to pilot than other ships of their same size which are not as technologically advanced?

Yes.

14. Would your opinion about the safety of the Orca class vessels vary based on how they are billed for pilotage services, i.e., based on GRT or IGT tonnage?

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No, as the vessels' superior handling characteristics are the same no matter how they are billed for services.

15. Does this conclude your testimony?

Yes.