

NATIONAL TRANSPORTATION SAFETY BOARD
Public Meeting of June 7, 2016
(Information subject to editing)

Collision between Bulk Carrier *Conti Peridot* and Tanker *Carla Maersk*
Houston Ship Channel near Morgan's Point, Texas,
March 9, 2015
NTSB/DCA15MM017

This is a synopsis from the NTSB's report and does not include the Board's rationale for the findings, probable cause, and safety recommendations. NTSB staff is currently making final revisions to the report from which the attached conclusions and safety recommendations have been extracted. The final report and pertinent safety recommendation letters will be distributed to recommendation recipients as soon as possible. The attached information is subject to further review and editing.

EXECUTIVE SUMMARY

On March 9, 2015, at 1230 central daylight time, the inbound bulk carrier *Conti Peridot* collided with the outbound tanker *Carla Maersk* in the Houston Ship Channel near Morgan's Point, Texas. The collision occurred in restricted visibility after the pilot on the *Conti Peridot* was unable to control the heading fluctuations that the bulk carrier was experiencing during the transit. As a result, the *Conti Peridot* crossed the channel into the path of the *Carla Maersk*. No one on board either ship was injured in the collision, but an estimated 2,100 barrels (88,200 gallons) of methyl tert-butyl ether spilled from the *Carla Maersk*, and the two vessels sustained about \$8.2 million in total damage.

Safety issues identified in this accident include the following:

- **Inadequate bridge resource management:** Despite the pilot's difficulty controlling the *Conti Peridot's* heading leading up to the collision, he and the master did not work together to solve the problem. The pilot did not involve the master because he was unsure whether the master could do anything to help; the master said nothing because he was likely unaware of the vessel's heading fluctuations and may have been generally reluctant to question the pilot.
- **Insufficient pilot communications:** Although the pilot on the *Conti Peridot* was having difficulty controlling the vessel and had an earlier near-miss meeting with an oncoming ship, he did not alert the pilots on subsequent oncoming vessels, including the *Carla Maersk*.
- **Lack of predetermined ship movement strategies during restricted visibility in the Houston Ship Channel:** On the day of the accident, local pilot associations

determined that the increasing fog was significant enough to suspend pilot boardings of inbound ships. However, piloted vessels already under way continued the transit in the fog. Investigators found no existing predetermined ship movement strategy for piloted vessels already under way at the onset of hazardous weather conditions.

FINDINGS

1. Navigation equipment, vessel propulsion and steering systems, alcohol and other drug use, fatigue, medical conditions and medication use, and distraction from personal use of electronic devices were not factors in this accident.
2. The lack of communication between the master and the pilot on the *Conti Peridot*, and the lack of situation awareness exhibited by the master demonstrate inadequate bridge resource management, which reduced the effectiveness of the *Conti Peridot* bridge team.
3. The pilot on the *Conti Peridot* should have informed the *Conti Peridot* master and the pilots on the outbound vessels about the handling difficulty he was experiencing with the bulk carrier.
4. The dense fog led to loss of external visual cues and increased the cognitive workload for the pilot on the *Conti Peridot*, which affected his ability to control the bulk carrier.
5. Vessel Traffic Service Houston/Galveston did not effectively monitor vessel traffic to identify the developing risk of collision during restricted visibility.
6. Predetermined ship movement strategies would enhance safety for vessels under way in the Houston Ship Channel during restricted visibility.

PROBABLE CAUSE

The National Transportation Safety Board determines that the probable cause of the collision between bulk carrier *Conti Peridot* and tanker *Carla Maersk* in the Houston Ship Channel was the inability of the pilot on the *Conti Peridot* to respond appropriately to hydrodynamic forces after meeting another vessel during restricted visibility, and his lack of communication with other vessels about this handling difficulty. Contributing to the circumstances that resulted in the collision was the inadequate bridge resource management between the master and the pilot on the *Conti Peridot*.

RECOMMENDATIONS

As a result of this accident, the NTSB issued safety recommendations to BBG (Bremer Bereederungs-gesellschaft mbH & Co., the *Conti Peridot*'s operating company), the Houston Pilots Association, and the Lone Star Harbor Safety Committee.

To BBG (Bremer Bereederungsgesellschaft mbH & Co., the *Conti Peridot's* operating company):

Inform your personnel of the circumstances of this accident, and require training and audit procedures to ensure that bridge resource management is practiced during all operations.

To the Houston Pilots Association:

Inform your members about this accident and the need for effective bridge resource management and timely communication between pilots when circumstances could impact the safety of vessel operations.

To the Lone Star Harbor Safety Committee:

Develop predetermined ship movement strategies (considering options such as increased vessel separation, one-way traffic, and/or anchoring) to be implemented before or at the onset of hazardous weather conditions to enhance safety for vessels under way in the Houston Ship Channel.