SWELL BONKS

National Transportation Safety Board

Washington, D.C. 20594

Safety Recommendation

Date: February 17, 2000

In reply refer to: M-99-23

Admiral James Loy Commandant U.S. Coast Guard 2100 Second Street, S.W. Washington, D.C. 20591

On May 14, 1997, the U.S. Coast Guard buoy tender *Cowslip* and the Panamanian container ship *Ever Grade* collided in the Columbia River near Astoria, Oregon. One person was injured as a result of the accident. The *Ever Grade* was only slightly damaged in the collision, but the *Cowslip* sustained serious damage to its hull and superstructure. The cost of repairs for both vessels was estimated at more than \$1.2 million.

The National Transportation Safety Board determined that the probable cause of the collision between the Panamanian container ship *Ever Grade* and the U.S. Coast Guard buoy tender *Cowslip* was the failure of the pilot of the *Ever Grade* to gauge the turn at Tansy Point properly due to imprecise radar estimations of his vessel's position and late application of rudder, which combined to cause the ship to swing excessively wide in the turn and to strike the *Cowslip*. Contributing to the accident was the joint decision of the pilot of the *Ever Grade* and the commanding officer (CO) of the *Cowslip* to attempt a meeting at a sharp bend in the channel during a period of severely reduced visibility.

Safety Board Vice Chairman Robert T. Francis II issued the following statement regarding the adopted probable cause with his concurrence:

I believe that the probable cause statement is sufficient as far as it goes, but it does not go far enough. Bridge resource management techniques and effective ship-to-ship communications are enormously important tools to enhance safety in maritime operations. Our failure to note breakdowns in communication on and between the vessels as a contributing factor in the collision does not, in my opinion, enhance either the safety of marine operations or the advancement of these issues in the maritime pilot community.

The two vessels involved in this collision were operating in near zero visibility due to fog. The watchstander on each vessel detected the other vessel on radar, and the vessels communicated while they were still more than 5 miles apart. At that time, the pilot of the *Ever Grade* and the CO of the *Cowslip* agreed to meet port to port; both recognized that the meeting would take place very close to Tansy Point, a sharp turn in the channel.

The Safety Board has pointed out the danger of vessels meeting or overtaking in bends in a number of past reports involving collisions, including the 1978 collision of the U.S. container ship Sea Land Venture with the Danish tank ship Nelly Maersk near Galveston, Texas; the 1978 collision of the Greek bulk carrier Irene S. Lemos with the Panamanian bulk carrier Maritime Justice near New Orleans, Louisiana; the 1979 collision of the tank ship Marine Duval with the tank ship Mobil Vigilant near Beaumont, Texas; the 1980 collision of the U.S. Coast Guard cutter Blackthorn with the U.S. tank ship Capricorn near Tampa, Florida; the 1985 collision of the U.S. passenger vessel Mississippi Queen with the U.S. towboat Crimson Glory near Donaldsonville, Louisiana; and the 1986 collision of the British bulk carrier Palm Pride with barges in a fleet sited along the Mississippi River near New Orleans, Louisiana. In each of these accidents, the Safety Board found that the attempt to meet or overtake in a bend was a causal factor. As a result of these investigations, the Safety Board issued a series of safety recommendations to the American Pilots' Association, individual pilot associations, and the U.S. Coast Guard, asking these organizations to either urge or require mariners to take action that would prevent deep draft vessels from attempting to pass one another in channel bends. To date, none of these recommendations have been implemented as proposed. The prevailing arguments against banning ships from passing in channel bends appear to be that such a ban would adversely affect the commerce of the port and that a regulatory requirement would be unenforceable.

The Safety Board continues to view the practice of deep draft vessels meeting or overtaking other vessels at channel bends to be highly dangerous. Deep draft vessels are, by their nature, restricted in their maneuverability. When such vessels are maneuvering to turn in a sharp bend in a channel, especially during periods of reduced visibility, the danger is orders of magnitude greater. The slightest miscalculation or momentary lapse in performance on the part of the pilot, or a malfunction of main propulsion or steering gear, can result in a serious collision, which not only endangers the lives of those on board the vessels involved but also the environment and the population centers along the waterway.

⁽a) National Transportation Safety Board. 1979. Collision of American Containership SS Sea-Land Venture and Danish Tanker M/T Nelly Maersk, Inner Bar Channel, Galveston, Texas, August 27, 1978. Marine Accident Report NTSB/MAR-79/16. Washington, DC. (b) National Transportation Safety Board. 1980. Collision of Greek Bulk Carrier M/V Irene S. Lemos and Panamanian Bulk Carrier M/V Maritime Justice, Lower Mississippi River, Near New Orleans, Louisiana, November 9, 1978. Marine Accident Report NTSB/MAR-80/4. Washington, DC. (c) National Transportation Safety Board. 1980. Collision of S/T Mobil Vigilant and S/T Marine Duval on the Neches River Near Beaumont, Texas, February 25, 1979. Marine Accident Report NTSB/MAR-80/08. Washington, DC. (d) National Transportation Safety Board. 1980. Collision of U.S. Coast Guard Cutter Blackthorn and U.S. Tankship Capricorn, Tampa Bay, Florida, January 28, 1980. Marine Accident Report NTSB/MAR-80/14. Washington, DC. (e) National Transportation Safety Board. 1986. Collision Between U.S. Passenger Vessel Mississippi Queen and U.S. Towboat Crimson Glory in the Mississippi River Near Donaldsonville, Louisiana, December 12, 1985. Marine Accident Report NTSB/MAR-86/09. Washington, DC. (f) National Transportation Safety Board. 1987. Collision of British Bulk Carrier M/V Palm Pride with the Sioux City and New Orleans Barge Fleet in the Mississippi River Near Luling-Destrehan Bridge, June 23, 1986. Marine Accident Report NTSB/MAR-87/03. Washington, DC.

In the case of the *Cowslip–Ever Grade* collision, if the *Cowslip* CO had chosen to hold up (or if the pilot of the *Ever Grade* had requested him to hold up) below Tansy Point until the *Ever Grade* completed its turn before attempting to execute the meeting, the collision probably would have been avoided. The *Cowslip* did not have to meet a strict arrival schedule and, in fact, was not in a great hurry to reach its destination.

Under such conditions, delaying for a few minutes while the deep draft vessel completed its turn in the channel before attempting to pass it would have been the prudent action to take. Prudence, however, is often learned too late, as the *Cowslip–Ever Grade* accident illustrates. Based on the circumstances of this accident, the Safety Board concluded that the safety of operations in pilotage waters would be enhanced if Coast Guard COs avoided meeting and overtaking deep draft vessels at sharp bends or turns in channels, especially during periods of reduced visibility.

Therefore, the National Transportation Safety Board recommends that the U.S. Coast Guard:

Issue instructions to U.S. Coast Guard commanding officers to avoid, whenever operational imperatives permit, meeting deep draft vessels at sharp bends or turns in channels, especially during periods of reduced visibility. (M-99-23)

Also, the Safety Board issued safety recommendations to the Oregon Board of Maritime Pilots.

Please refer to Safety Recommendation M-99-23 in your reply. If you need additional information, you may call (202) 314-6455.

Chairman HALL, Vice Chairman FRANCIS, and Members HAMMERSCHMIDT, GOGLIA, and BLACK concurred in this recommendation.

By: Jim Hall Chairman