



# National Transportation Safety Board

## Marine Accident Brief

### Collision between Containerships *Marcliff* and *APL Guam*

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<b>Accident type</b>	Collision	<b>No.</b>	DCA19FM028
<b>Vessel names</b>	<i>APL Guam</i> , <i>Marcliff</i> , <i>Hansa Steinburg</i>		
<b>Location</b>	YL-4 Anchorage, Port of Yokohama, Tokyo Bay, Japan 35°25.46' N; 139°42.98' E		
<b>Date</b>	March 21, 2019		
<b>Time</b>	2327 Japan standard time (coordinated universal time + 9 hours)		
<b>Injuries</b>	None		
<b>Property damage</b>	\$1,178,200 est.		
<b>Environmental damage</b>	None reported		
<b>Weather</b>	Visibility clear with passing clouds, winds southwest at 18 knots, seas 1–2 feet, air temperature 64°F, water temperature 64°F		
<b>Waterway information</b>	Yokohama is a busy cargo and passenger port within the heavily congested Tokyo Bay. Two channels, the Yokohama Passage and the Tsurumi Passage, provide shipping access to the piers and terminals within the port. Several anchorage areas are located outside the channels in the bay.		

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At 2327 local time on March 21, 2019, the containership *Marcliff* was outbound from the Port of Yokohama, Japan, when it collided with the containership *APL Guam*, which was inbound to an anchorage at the port. After the initial collision, the *Marcliff* then collided with the containership *Hansa Steinburg*, which was anchored nearby. No pollution or injuries were reported. Damages to the three vessels were estimated at \$1,178,200.



*APL Guam* preaccident. (Source: V. Tonic)

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*Marcliff* preaccident. (Source: V. Tonic)

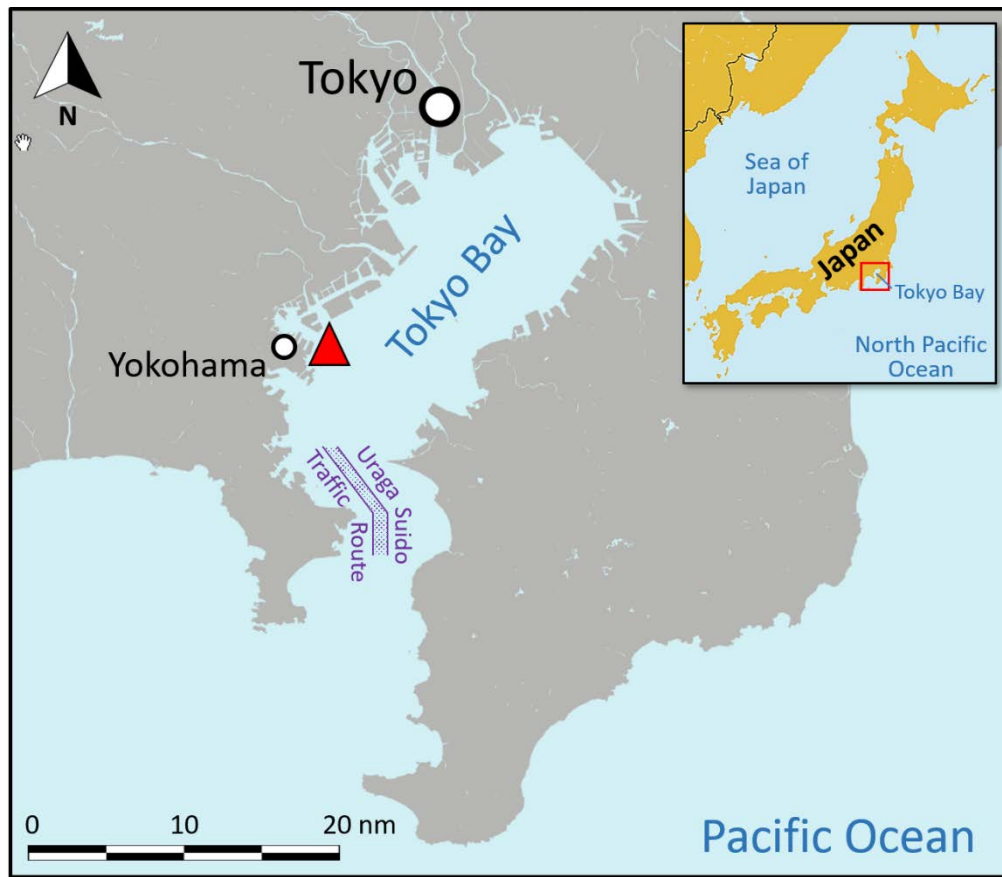
### Background

The 505-foot-long, US-flagged *APL Guam* was built in 2000 at the Jurong Shipyard in Singapore and was equipped with a single propeller driven by a 18,200-hp diesel engine. The vessel was employed on a regular circular route between Guam, Saipan, Korea, and Japan. The 468-foot-long Antigua and Barbuda-flagged *Marcliff* was built in 2007 at Dae Sun Shipbuilding and Engineering in Busan, South Korea. The vessel had a single propeller driven by a 10,520-hp engine and carried cargo between various ports in East Asia. The 574-foot-long Liberian-flagged *Hansa Steinburg* was built in 2010 at the Guangzhou Wenchong Shipyard in Guangzhou, China, and had a single propeller driven by a 22,341-hp diesel engine. The vessel was employed in cargo service between ports in China and Japan. All three vessels were equipped with bow thrusters.



*Hansa Steinburg* postaccident. (Source: D. Nimura)

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Accident location. (Background source: Google Maps)

### Accident Events

At 2155 on March 21, a pilot boarded the *APL Guam* near the entrance to Tokyo Bay. After conducting a master/pilot exchange with the containership's master, the pilot took navigational control (the conn) of the vessel as it transited northwest at about 12 knots through the Uruga Suido Traffic Route in the southern end of the bay. The master remained on the bridge with the pilot and the vessel's bridge team, which included the third mate and a helmsman who manually steered the ship. About an hour later, the vessel exited the traffic route and turned north toward its destination of Yokohama, about halfway up the bay. The master told investigators that the *APL Guam* usually went directly to a pier in Yokohama, but occasionally anchored while awaiting a berth. For this voyage, the plan was to anchor the vessel in area YL-4, just outside the port. At 2303, as the *APL Guam* approached the anchorage, the pilot ordered the engine to half ahead.

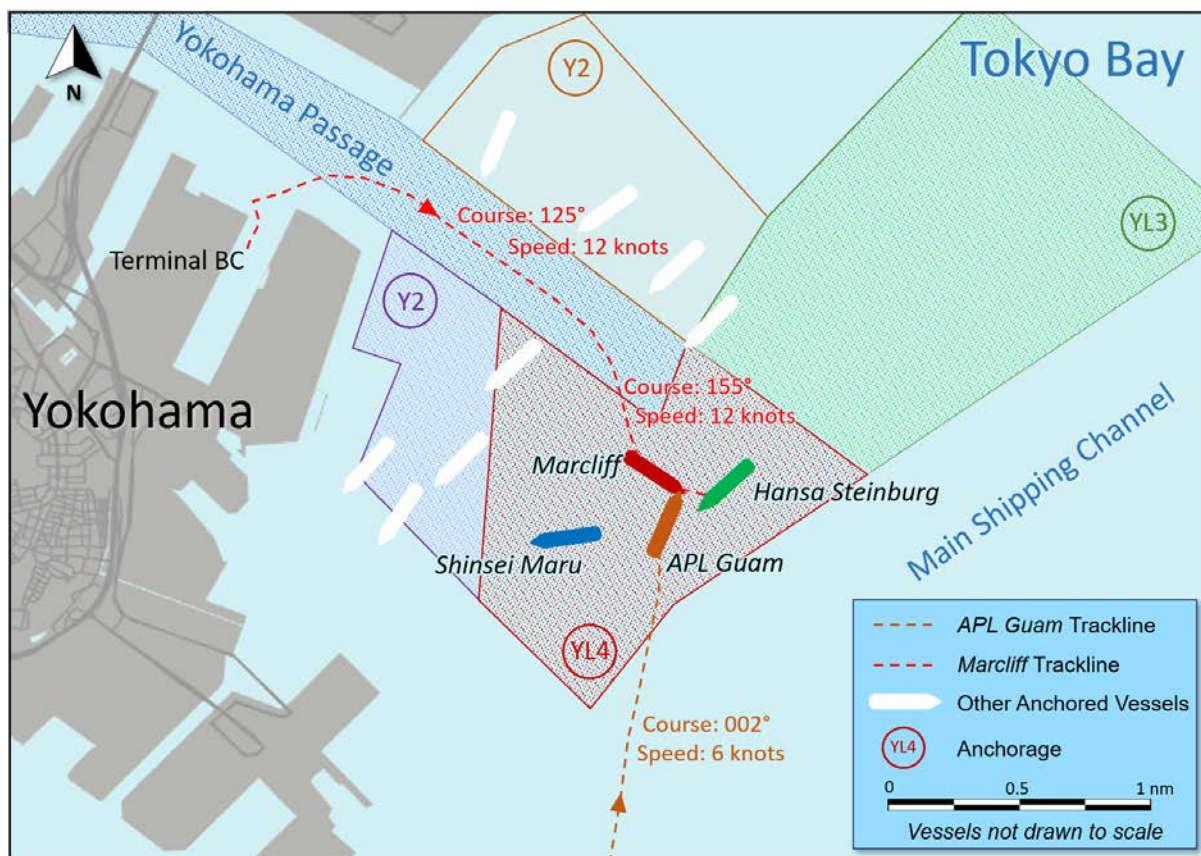
About the same time, the *Marcliff* took in all lines and got under way from Terminal BC in the Port of Yokohama. The master had the conn of the *Marcliff* while the third mate operated the engine order telegraph and a helmsman took the wheel. Per Japanese regulations, a pilot was not required for vessels under 10,000 gross tons, such as the *Marcliff*. The master noted to investigators that the *Marcliff* had been specifically designed and built to be able to operate in Japanese ports without pilots or tugboats. Prior to getting under way, the vessel's crew had notified Yokohama port operations service via radio of their intended departure, as required by local regulations. According to the master, the port operations service would normally respond to this notification with a report of other vessel traffic in the area. However, as recorded on the *Marcliff*'s voyage data

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recorder (VDR) communications and bridge audio, no traffic information was provided in the response from the port operations service.<sup>1</sup>

On the *APL Guam*, the chief mate, bosun, and other deck crew were on the bow preparing for anchoring. About 2306, the pilot ordered the engine to slow ahead. Five minutes later, he ordered an engine speed of dead slow ahead. The pilot stated that he intended to bring the vessel to the assigned anchoring position after passing between two anchored vessels, the 810-foot-long tanker *Shinsei Maru* to port and the *Hansa Steinburg* to starboard. The distance between the anchored vessels was about .45 nautical mile. At 2317, deck lighting on the bow of the *APL Guam* was illuminated to allow the anchoring team to work.

After getting under way, the *Marcliff* master had turned the vessel around and maneuvered it into the Yokohama Passage, a regulated waterway through the port where anchoring was prohibited and meeting vessels were required to pass port side to port side. The Yokohama Passage extended outside the port area but did not continue to the main shipping channel. Rather, it terminated at anchorage YL-4, requiring vessels entering or exiting the passage to transit through the anchorage.



Yokohama harbor with accident vessel tracks. (Background source: Google Maps)

<sup>1</sup> VDRs maintain continuous, sequential records of data relating to a ship's equipment and its command and control, and capture bridge audio from certain areas in the pilothouse and on the bridge wings. Regulation 20 of the *International Convention for the Safety of Life at Sea* (SOLAS) Chapter V requires all passenger ships and all cargo ships of 3,000 or more gross tons (International Tonnage Convention), built on or after July 1, 2002, to carry VDRs.

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Upon entering the Yokohama Passage, the *Marcliff* master ordered the vessel's engine speed increased to 90 rpm. The third mate later told investigators that, in response, he set the engine order telegraph to 86 rpm because at 90 rpm, the vessel would have exceeded the Port of Yokohama's 12-knot speed limit. At 2317, the master ordered a course of 125, which aligned the *Marcliff* with the outbound direction of the passage. Throughout the transit, the master and third mate carried on a conversation in their native language. According to US Coast Guard translators who reviewed the VDR bridge audio recording after the accident, the conversation occasionally involved personal matters, but was otherwise professional. The conversation was interrupted for helm and engine orders, which were spoken in English. The helmsman was not the same nationality as the master and third mate and did not participate in the non-English conversation.

As the *APL Guam* continued toward its designated anchorage, its speed was slowly decreasing. By 2318, the speed was 7.3 knots. At that time, the pilot ordered the engine to stop, and the vessel further slowed to 6 knots before the pilot ordered dead slow ahead again. At 2321, the pilot ordered a course of 000.

The *Marcliff* master intended to head south once his ship entered the main shipping channel, so at 2322, as the *Marcliff* approached the end of the Yokohama Passage, he ordered a starboard turn to course 155 to maneuver his vessel south-southeast through anchorage YL-4. This course would also bring the *Marcliff* between the *Shinsei Maru* and the *Hansa Steinburg*, opposite the inbound *APL Guam*. The master and the third mate told investigators that they saw the *APL Guam*, and the third mate had initially assumed that it was anchored. However, the master stated that he could see by his radar display that the *APL Guam* was under way at "approximately 4.5 knots." The master further stated that he intended to conduct a starboard-to-starboard passing with the *APL Guam*. He said that in the congested waters of Tokyo Bay, it was not uncommon to pass vessels at "2 cables distance," and he believed that there were at least 2 cables on either side of his vessel if it passed between the *APL Guam* on its starboard side and the *Hansa Steinburg* on its port side.<sup>2</sup>

The *APL Guam* master told investigators that he had not expected the *Marcliff* to turn to the south-southeast (toward his vessel) but expected it to continue along the axis of the Yokohama Passage until it reached the main shipping channel. However, the master and the pilot saw the *Marcliff* make its turn. At 2324, about 1 minute after the *Marcliff* had steadied on 155 degrees, the pilot requested "one long blast" on *APL Guam*'s whistle. Shortly thereafter, the *APL Guam* VDR recorded a 7-second blast on the ship's whistle. According to the *APL Guam* third mate, the prolonged blast was intended "to catch the attention of the *Marcliff*." The pilot then ordered the rudder to hard starboard and engine to slow ahead.

At 2325:09, the *APL Guam* master was recorded on his vessel's VDR bridge audio expressing bewilderment at the actions of the *Marcliff*. Eight seconds later, the vessel's crew sounded six short blasts on the ship's whistle at the pilot's request.<sup>3</sup> Shortly thereafter, the *Marcliff* master said to the third mate in their native language, "so, there is a ship on the go, and we will pass between..." He asked the helmsman what course he was steering. The helmsman answered

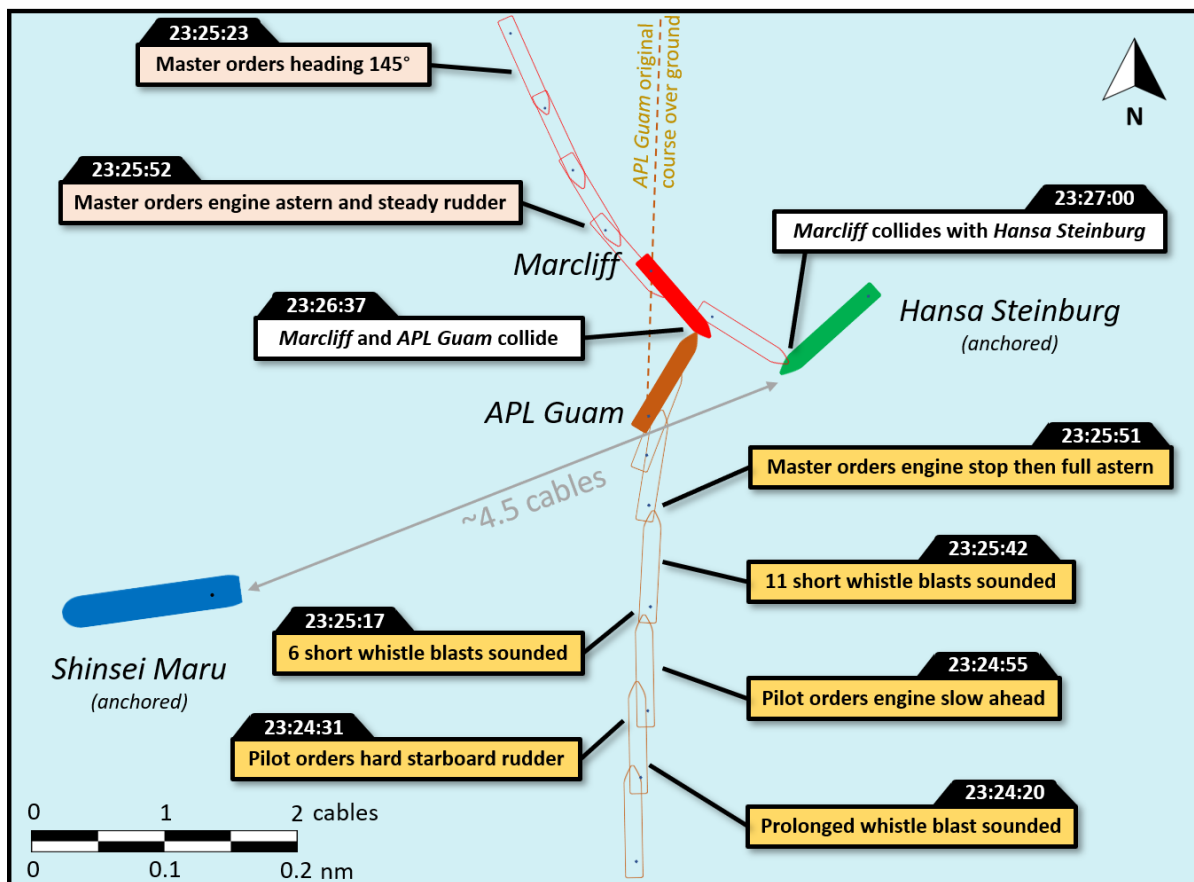
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<sup>2</sup> A *cable* is a nautical unit of length equal to 1/10<sup>th</sup> of a nautical mile, or about 200 yards.

<sup>3</sup> By international convention, five or more short blasts indicate that the vessel making the signal does not understand the intentions or actions of the other vessel or is in doubt whether sufficient action is being taken by the other vessel to avoid collision.

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“155” (the most recently ordered heading), after which the master ordered course 145—10 degrees to the vessel’s port.



**Accident timeline. Vessels drawn approximately to scale; positions compiled from automatic identification system (AIS) and VDR data.**

At 2325:42, the *APL Guam*'s crew sounded eleven short blasts on the whistle. A few seconds later, the *Marcliff* master yelled an expletive in English before speaking with the third mate in his native language. The third mate recommended, in English, “astern,” to which the master responded in their native language, “No, it wouldn’t work.” The *Marcliff* master told investigators that he had not expected the *APL Guam* to turn to starboard, and he believed that if the *APL Guam* had maintained its original course, the vessels would have passed safely starboard to starboard.

At 2325:51, the *APL Guam* master took the conn of the vessel by ordering the vessel’s engine stopped. Eight seconds later, he ordered the engine full astern. He later told investigators that he had waited to order full astern until the engine rpm had reduced to 0. The master also stated that he moved the bow thruster controller to full starboard, although at the speed the *APL Guam* was moving (about 6 knots), he knew that the thruster would have little effect. At the same time, short whistle blasts were being continuously sounded on both the *APL Guam* and another vessel. Investigators could not determine conclusively which vessel—either the *Hansa Steinburg* or another vessel—was the second ship sounding its whistle.

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At 2325:52, the *Marcliff* VDR recorded the master ordering “astern!” on the ship’s engine. According to the third mate, the master also depressed the “cancel limit” button on the engine order telegraph, overriding the engine’s control program. Thirteen seconds later, the master issued a rudder order that was indecipherable on the VDR audio recording, but quickly countermanded that order by stating “steady.” He told investigators that at this time he knew that a collision was unavoidable, and his orders were intended to lessen the impact.

At 2326:26, the *APL Guam* master warned crewmembers on the bow via handheld radio of the impending collision, and, 11 seconds later, the *APL Guam*’s bow struck the starboard-side bow of the *Marcliff*. The bow of the *APL Guam* scraped aft across the *Marcliff*’s starboard bow and the forwardmost deck-stowed container on the *Marcliff*’s starboard side. The collision altered the *Marcliff*’s course to port, and, after it separated from the *APL Guam*, the *Marcliff*’s forward momentum carried it toward the *Hansa Steinburg* at a speed of 9.2 knots.

At 2326:48, the *Marcliff* master ordered the engine to full astern. Twelve seconds later, the *Marcliff*’s bow struck the starboard bow of the anchored *Hansa Steinburg*, bringing the *Marcliff* to nearly a dead stop.

Following the collisions, the masters on the *Marcliff* and *APL Guam* maneuvered their vessels to safety while the *APL Guam* pilot reported the collision to Tokyo Bay vessel traffic service (“Tokyo MARTIS”). Crewmembers on each of the three vessels checked for injuries and investigated for any flooding caused by the collision, but they did not find either. The *APL Guam* proceeded to its originally assigned anchorage, and the *Marcliff* requested and was assigned an anchorage location in area YL-4.



Damage to *APL Guam* bow (left); *Marcliff* bow, starboard side, and container (center); and *Hansa Steinburg* starboard-side bow. (Source: US Coast Guard)

As a result of the collision, the shell plating and bulwarks around the bow and the bow stem near the deckline of the *APL Guam* were stove in, and a hole was opened up in the hull on the starboard bow. The deck plating at the bow was bent downward, and deck and hull framing in the bow area was warped and fractured. On the *Marcliff*, the starboard-side bulwarks on the bow were bent inward and a small crack in the shell plating was opened near the deckline, the starboard-side windbreak was pushed back into the container behind it, and the container suffered a gash nearly three-quarters its length. A container mounting on the starboard-side main deck was also sheared and bent aft. When the *Marcliff* collided with the *Hansa Steinburg*, the *Marcliff*’s bow was pressed inward near the top of the stem, and bulwarks were folded inward. On the *Hansa Steinburg*,

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hull plating near the vessel's name plate was inset, and several small cracks were opened. Total damage for all three vessels was estimated at \$1,178,200.

### Additional Information

The master of the *APL Guam* had 21 years' experience at sea, almost entirely on containerships. He had been master of the *APL Guam* since July 2017—his first assignment as a master—rotating 84 days on, 84 days off with other masters. He had worked for the operating company since 2010, serving as chief mate on various vessels prior to becoming master of the *APL Guam*.

The third mate on the *APL Guam*, who was the officer of the watch and was operating the engine order telegraph at the time of the accident, stated that she had been credentialled for 3 years. She had been aboard the *APL Guam* for 4 months. This was her first experience on a containership, having previously served on a training ship and small passenger vessels. When under way, the third mate stood watch from 0800 to 1200 and from 2000 to 2400 each day.

The able-bodied seaman (AB) at the helm of the *APL Guam* during the accident stated that she had about 15 years' experience at sea working on various vessels including containerships. The accident occurred near the end of her 4-month rotation on the *APL Guam*, her first experience with the vessel. The AB's normal underway watch was lookout and helmsman from 0800 to 1200 and from 2000 to 2400 each day. She stated that during port arrivals, helmsmen would rotate each hour so that they "don't get too tired, can stay focused."

The pilot on board the *APL Guam* had been registered as a pilot since December 2000 and held a valid credential as a "first grade" pilot for the Tokyo Wan district.<sup>4</sup>

The master of the *Marcliff* stated that he had 12 years' experience on board the vessel and a nearly identical vessel (sister vessel), the *Marcloud*, beginning from the vessels' delivery in 2007. Investigators were unable to obtain further information about the master's experience and credentials.

The third mate on the *Marcliff* stated that he had "worked as navigator" on various ships since 2011, primarily on container ships. He joined the *Marcliff* about 1 month prior to the accident, and this was his first contract working on the vessel. He told investigators that during departures, he was assigned to the bridge to "comply with orders" from the master and operate the engine order telegraph.

The AB at the helm of the *Marcliff* during the accident had been working for the same company since first sailing in 2010. The AB had four previous contracts on board the *Marcliff* and one contract on the *Marcloud*, as well as contracts on various other cargo vessels. Each contract was normally 10 months long, and he had been aboard 8 months at the time of the accident. When under way, the AB stood watch from 0600 to 1200 and from 1800 to 2400.

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<sup>4</sup> Pilots in Japan are divided into three grades, with the most experienced and qualified being first grade and the least experienced being third grade. In addition to other qualification and training requirements, a first grade pilot must have served as a master of an ocean-going vessel of not less than 3,000 gross tons for more than 2 years. "Process to be a Pilot," [https://www.pilot.or.jp/english/contents/09\\_process\\_to\\_be\\_a\\_pilot.pdf](https://www.pilot.or.jp/english/contents/09_process_to_be_a_pilot.pdf), accessed July 9, 2019.



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### Analysis

Although it was dark, visibility on the night of the accident was clear, and bridge team members from both the *Marcliff* and the *APL Guam* stated that they could see the other vessel ahead of them. VDR replays of radar displays on both vessels showed an uncluttered picture with the other vessel's radar return and automatic radar plotting aid (APRA) generated trail clearly visible.<sup>5</sup>

The *Marcliff* master stated that his intention was to pass starboard to starboard with the *APL Guam*, and that had the *APL Guam* continued on its original course, the *Marcliff* would have passed safely with 2 cables distance between the *APL Guam* on one side and the *Hansa Steinburg* on the other. However, investigators estimate that the total distance between the *Hansa Steinburg* and the anchored *Shinsei Maru* was about 4.5 cables—wide enough for only one vessel to pass between the two while maintaining more than 2 cables separation on either side. Even if the *APL Guam* had continued on its original course instead of turning hard starboard, the total distance between the *APL Guam* and *Hansa Steinburg*, in which the *Marcliff* intended to pass, was less than 2 cables.

Because the *APL Guam* and the *Marcliff* were in a crossing situation and the *APL Guam* was on the starboard side of the *Marcliff*, by international convention, the *Marcliff* was required to keep out of the way of the *APL Guam* and avoid crossing ahead of it.<sup>6</sup> The master ordered a 10 degree turn to port about 1 minute before the collision, but the *Marcliff* should have altered course to starboard to avoid crossing ahead of the *APL Guam*. A turn to starboard would have been predictable by the *APL Guam* pilot and bridge team and resulted in a port to port meeting between the vessels. Thus, the master's turn to port (and his stated intention to pass starboard to starboard) would have been unexpected by the pilot and bridge team on the *APL Guam*. The *Marcliff* master did not appear to recognize the dangerous situation that was developing until 2325:51—45 seconds before the accident—and at first took no action despite a recommendation from the third mate to use astern propulsion. When the master eventually ordered the engine astern, it was too late to avoid the collision.

Prior to the accident, deck lights on the bow of the *APL Guam* were illuminated to allow the crew to prepare for anchoring. As viewed from the *Marcliff*, these lights may have obscured the master and third mate's view of the *APL Guam*'s normal navigation lights, or otherwise caused confusion as to the vessel's size and aspect. The third mate told investigators that he initially thought the *APL Guam* was anchored. Additionally, while maneuvering through the anchorage, the master and third mate were carrying on a conversation in their native language. While the conversation was described as professional, it is possible that it provided some level of distraction that, combined with the confusing lighting of the *APL Guam*, delayed the master's response to the developing situation. Therefore, a loss of situational awareness may have been a factor in the collision.

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<sup>5</sup> A *trail* is a simulated afterglow that follows a radar contact displayed on an ARPA. The direction and length of the trail provides the operator an indication of the course and speed, respectively, of the vessel being tracked by the radar.

<sup>6</sup> *Convention on the International Regulations for Preventing Collisions at Sea, 1972* (72 COLREGS), Rule 15—Crossing Situation.

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When it became apparent that the *Marcliff* was not taking appropriate action to avoid collision, the *APL Guam* was permitted to take action.<sup>7</sup> After the *APL Guam* crew sounded the prolonged blast of the whistle, the pilot ordered hard starboard on the ship's rudder—the expected action to avoid the collision with the *Marcliff*. The *APL Guam* pilot's concern for risk of collision was reasonable, and his decision to maneuver to attempt to avoid the collision was appropriate.

The master of the *APL Guam* was monitoring the developing situation with the *Marcliff*, and, at the point that he determined that a collision was imminent, he took the conn from the pilot and ordered the engine to stop and then to crash astern. Although the rudder and engine orders did not prevent the collision with the approaching *Marcliff*, they likely lessened the severity of the accident by slowing the speed at which the two vessels impacted. Thus, the actions of the *APL Guam* pilot and bridge team to avoid collision were appropriate.

Prior to the accident, neither ship contacted the other ship via VHF radio to attempt to resolve the developing situation. Both vessels were equipped with automatic identification systems, and therefore each crew had access to information about the other ship, including its name, course, and speed. Although there is no requirement in international regulations to use radio for collision avoidance, these communications may have prevented this accident either through early coordination of passing arrangements or by alerting the other vessel to the emergency.

In August 2015, the requirement for compulsory pilotage in the Port of Yokohama was raised from 3,000 gross tons to 10,000 gross tons.<sup>8</sup> This change was in line with the relaxation of compulsory pilotage requirements in other Japanese ports, and vessels such as the *Marcliff* were designed and built to take advantage of this change. Pilots have local knowledge of the ports in which they operate, speak the native language, have information on other ships under pilotage, and are familiar with local regulations and procedures. Had a pilot been at the conn of the *Marcliff* when the vessel got under way on the accident date, it is more likely that the pilot would have known of the inbound *APL Guam* under pilotage, been familiar with and anticipated the actions of the other pilot, and, if necessary, communicated with the other pilot via VHF radio to avoid meeting in a close-quarters situation.

As shown in the illustration on page 4, the Yokohama Passage terminates in anchorage YL-4 and does not extend to the main shipping channel. Ships inbound to or outbound from the passage must pass through the anchorage, navigating between anchored vessels. This arrangement encourages vessel bridge teams to take the most expeditious route through the anchorage, as the *Marcliff* master did when he turned south-southeast, regardless of the risks of navigating in close proximity to anchored vessels. Thus, the arrangement of the Yokohama Passage, terminating in the YL-4 anchorage instead of extending to the main shipping channel, increases the risk of accidents such as this one.

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<sup>7</sup> 72 COLREGS, Rule 17—Action by Stand-on Vessel.

<sup>8</sup> Navigational Safety Committee, *Port Entry Manual – Port of Yokohama*, Yokohama: Navigational Safety Committee, 2018, page 3.

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### Probable Cause

The National Transportation Safety Board determines that the probable cause of the collision between the containerships *Marcliff* and *APL Guam* was the *Marcliff* master's attempt to pass between the *APL Guam* and the anchored *Hansa Steinburg* with insufficient safe maneuvering room. Contributing to the accident was a lack of communication between the *Marcliff* bridge team and the *APL Guam* pilot and bridge team to establish their maneuvering intentions.

### Early Communication Between Bridge Teams

Early communication can be an effective measure in averting close-quarters situations. The use of VHF radio can help to dispel assumptions and provide bridge teams with the information needed to better assess each vessel's intentions.

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### Vessel Particulars

Vessel	<i>APL Guam</i>	<i>Marcliff</i>	<i>Hansa Steinburg</i>
<b>Owner/operator</b>	R & D Investments, Inc./ APL Maritime Ltd.	Marcliff Schifffahrts GmbH/ MarConsult Schifffahrt GmbH & Co.	Hansa Steinburg mbH & Co./ Leonhardt & Blumberg Shipmanagement GmbH
<b>Port of registry</b>	Wilmington, Delaware	St. John's	Monrovia
<b>Flag</b>	United States	Antigua and Barbuda	Liberia
<b>Type</b>	Containership	Containership	Containership
<b>Year built</b>	2001	2007	2010
<b>IMO number</b>	9229609	9343663	9436094
<b>Classification society</b>	American Bureau of Shipping (ABS)	Det Norske Veritas - Germanischer Lloyd (DNV-GL)	Det Norske Veritas - Germanischer Lloyd (DNV-GL)
<b>Construction</b>	Steel	Steel	Steel
<b>Length</b>	505.2 ft (154 m)	468.2 ft (142.7 m)	575.6 ft (175.4 m)
<b>Beam/width</b>	82 ft (25 m)	74.2 ft (22.6 m)	90 ft (27.4 m)
<b>Draft</b>	31.2 ft (9.5 m)	26.9 ft (8.2 m)	35.8 ft (10.9 m)
<b>Tonnage</b>	13,764 GT ITC	9,610 GT ITC	18,252 GT ITC
<b>Engine power; manufacturer</b>	14,832 hp (11,060 kW) MAN B&W 7L60MC-E diesel engine	10,520 hp (7,845 kW) MAN B&W 6S46MC-C diesel engine	22,341 hp (16,660 kW) MAN B&W 7S60MC-C diesel engine
<b>Persons on board</b>	21	Unknown	Unknown

**NTSB investigators worked closely with our counterparts from US Coast Guard Activities Far East throughout this investigation.**

For more details about this accident, visit [www.nts.gov](http://www.nts.gov) and search for NTSB accident ID DCA19FM028.

**Issued: April 29, 2020**

The NTSB has authority to investigate and establish the probable cause of any major marine casualty or any marine casualty involving both public and nonpublic vessels under Title 49 *United States Code*, Section 1131. This report is based on factual information either gathered by NTSB investigators or provided by the Coast Guard from its informal investigation of the accident.

The NTSB does not assign fault or blame for a marine casualty; rather, as specified by NTSB regulation, “[NTSB] investigations are fact-finding proceedings with no formal issues and no adverse parties . . . and are not conducted for the purpose of determining the rights or liabilities of any person.” Title 49 *Code of Federal Regulations*, Section 831.4.

Assignment of fault or legal liability is not relevant to the NTSB’s statutory mission to improve transportation safety by conducting investigations and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report. Title 49 *United States Code*, Section 1154(b).