SAFETY ACCIDENT REPORT

Safety Investigation Report on the Collision of MV Mojaito, Road Harbour, Virgin Islands 26th July, 2025

GOVERNMENT OF THE VIRGIN ISLANDS
Premier's Office

The main objective of a marine safety investigation is to prevent future accidents by identifying their causes and circumstances. It does not aim to determine liability or assign blame.

NOTE

This report is not written with litigation in mind, and pursuant to *Regulation 24 (10), Merchant Shipping (Accident Reporting and Investigation) Regulations 2020* shall be inadmissible in any judicial proceedings whose purpose, or one of whose purposes, is to attribute or apportion liability or blame.

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Contents

Glossary of Abbreviations, Acronyms and Terms

Term	Definition
Aft	Toward the rear of a vessel
Bow	The forward part of a vessel
Chine	The edge where a boat's hull bottom meets the side
Stern	The rear end of a vessel
Port	The left-hand side of a vessel when facing forward
Starboard	The right-hand side of a vessel when facing forward
Helm	The position from which a vessel is steered
Hull	The main body of a vessel
Deck	The horizontal surface forming the top of the hull
Centre Console	A vessel layout with a centrally located steering console
Outboard Engine	An external engine mounted on the stern of a vessel.
Collision	Contact between a vessel and another object.
Aids to Navigation	Devices such as buoys and lights used to assist safe navigation
Lateral Buoy	A buoy marking the sides of a navigable channel.
Port-Hand Marker	A green buoy indicating the port side of a channel in IALA Region B
Watch Circle	The area within which a buoy may move while anchored
Lookout	A person designated to observe navigational hazards
Safe Speed	A speed that allows effective action to avoid collision
Chart Plotter	An electronic device displaying charts and vessel position
GPS Track	A recorded path showing a vessel's movement
Kill Cord	A safety lanyard that stops the engine if the operator is suddenly displaced
Personal Floatation Device (PFD)	Equipment designed to keep a person afloat in water
Rigid Inflatable Boat	A small craft with a rigid hull and inflatable tubes

Abbreviation / Acronym	Full Term
AtoN	Aid to Navigation
VI	Virgin Islands
BVIPA	British Virgin Islands Ports Authority
COLREGS	International Regulations for Preventing Collisions at Sea
DNV	Det Norske Veritas
ECHOMAP	Garmin EchoMap Chart Plotter Series
FRP	Fibreglass Reinforced Plastic
FL	Flashing (Light Characteristic)
G	Green (Light Colour)
GPS	Global Positioning System
HP	Horsepower
IALA	Intl Association of Marine Aids to Navigation and Lighthouse Authorities
IMO	International Maritime Organization
LAT	Lowest Astronomical Tide
MAIB	Marine Accident Investigation Branch
MSIRA	Marine Safety Investigation and Reporting Authority
MV	Motor Vessel
NM	Nautical Mile
OUPV	Operator of Uninspected Passenger Vessel
PFD	Personal Flotation Device
RIB	Rigid Inflatable Boat
SOP	Standard Operating Procedures
USCG	United States Coast Guard
USVI	United States Virgin Islands
VHF	Very High Frequency
VISMA	Virgin Islands Shipping and Maritime Authority

Figures

Synopsis

On 26th July, 2025, at approximately 8:45 p.m., Motor Vessel Mojaito, a 31-foot Stamas 310 Tarpon centre console powerboat powered by twin Suzuki 250-horsepower 4-stroke outboard motors, collided with a green steel lateral channel marker located about 0.4 nautical miles south of the Brandywine Bay entrance, while the vessel was travelling at an estimated speed of 24 knots, enroute from Xmas in July at Pond Bay, Virgin Gorda. Fortunately, no one was injured. The captain and crew utilised the life jackets and flotation devices available on board and deployed a rigid inflatable boat (RIB) attached to the MV Mojaito following the accident.

Nearby vessels, also enroute from the Xmas in July event, responded promptly to assist and ensure that all passengers were safely transported back to Village Cay, where the group was staying.

The Marine Safety Investigation and Reporting Authority (MSIRA) conducted a comprehensive investigation into the incident, examining all circumstances that contributed to its occurrence. The investigation identified several contributing factors, including:

- reduced situational awareness by the vessel's operator;
- limited public understanding of navigational aids and their significance, and
- failure to maintain a proper lookout.

Figure 1: MV Mojaito

Figure 2: MV Mojaito twin 250HP Suzuki Outboard Engines

Figure 3: View of the channel from Brandywine Bay

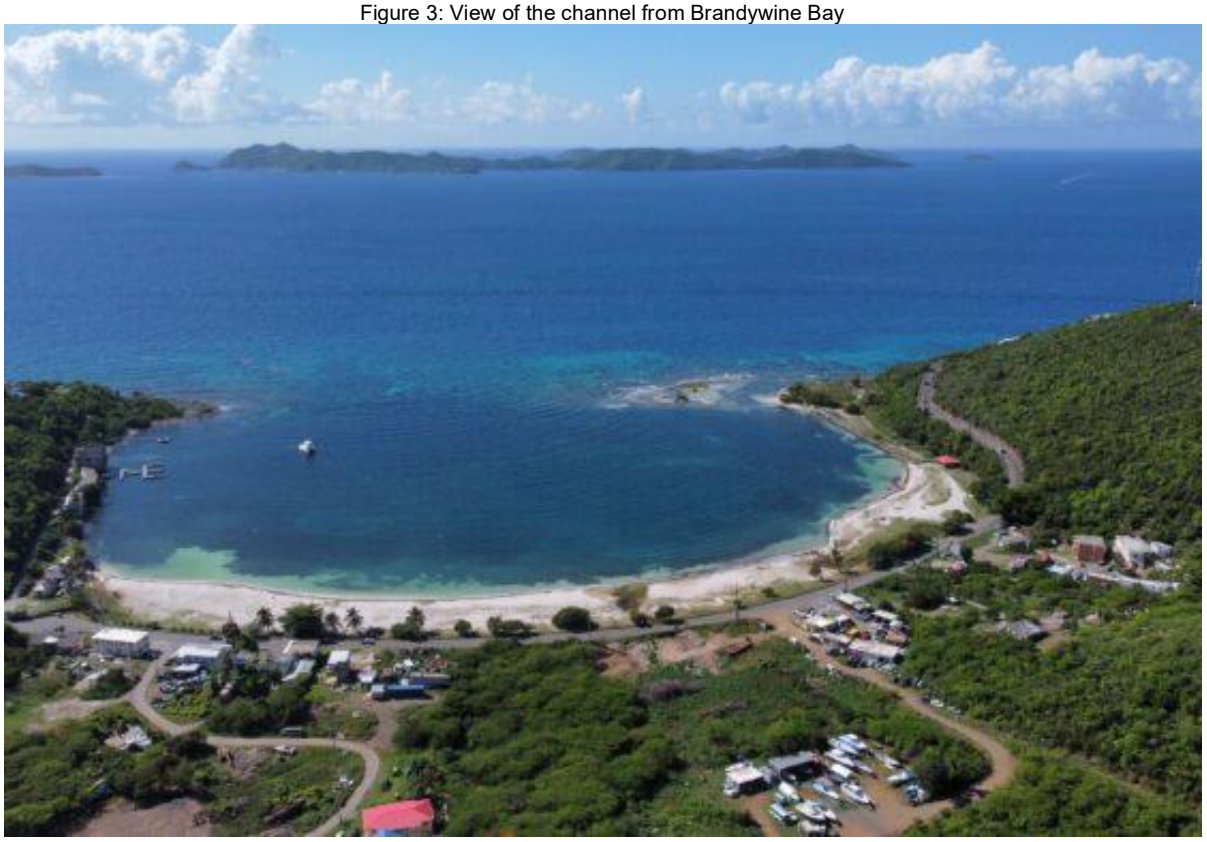
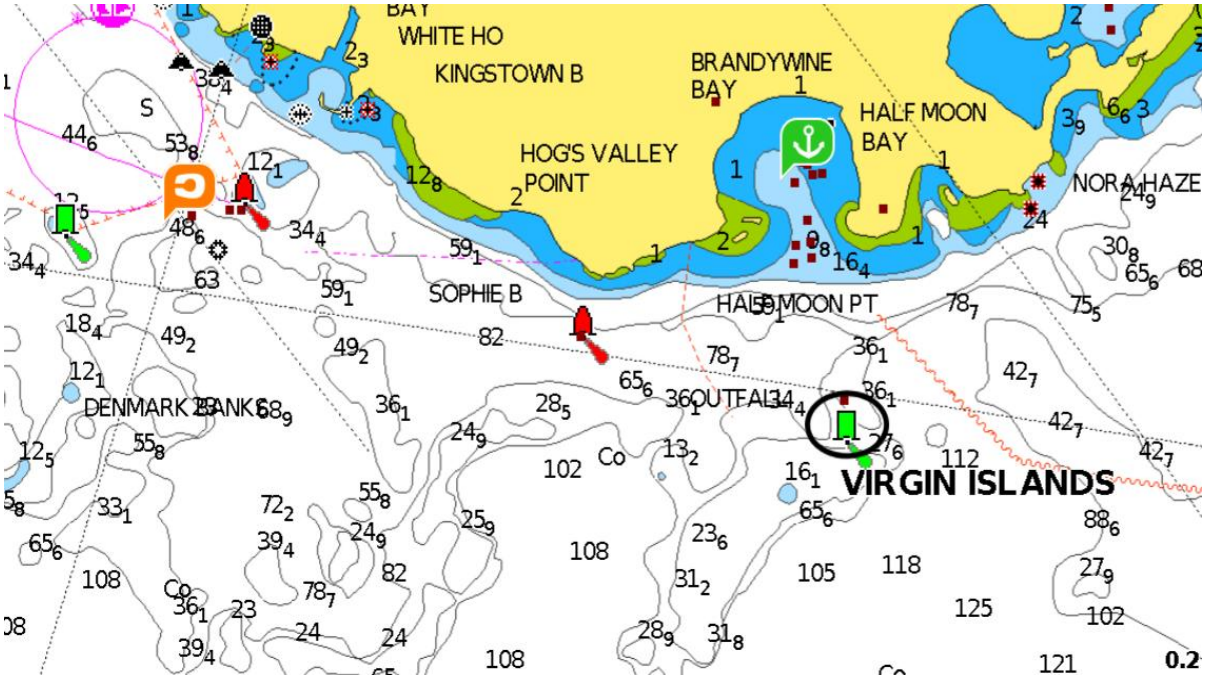


Figure 4: Extract from Navionics showing green steel lateral buoy (circled) z



Factual Information

Particulars of Vessel

Section	Details
Vessel name	MV Mojaito
Flag	Puerto Rico (United States)
Hull Identification Number (HIN)	STA31359D101
Registration Number	PR-3874-CC
Vessel Type	Centre Console
Make and model	Stamas 310 Tarpon
Length Overall	Approx. 31 feet
Propulsion	Two (2) x Suzuki 250hp Outboard Engines
Construction	Fibreglass Reinforced Plastic (FRP)
Crew on board	1
Passengers on board	9
1.2 Port of departure	Puerto Rico
Port of arrival (intended)	Road Town, BVI
Type of voyage	Pleasure Trip
Purpose of voyage	Attend Xmas in July
Weather conditions	Fair, light easterly winds, calm seas
Sea state	Slight
Visibility	Good
Time of incident	Approximately 8:45 p.m. (local time)
Date of incident	26th July, 2025
1.3 Type of incident	Collision
Location of incident	Leverick Bay Marina, BVI.
Injuries/fatalities	No injuries were reported; however, during the investigation, it was revealed that people sustained very minor injuries.

Narrative

Pre-incident/Arrival

On the morning of 24th July 2025, a group of ten individuals arrived in the Virgin Islands from Puerto Rico aboard the motor vessel Mojaito, a Stamas 310 Tarpon powerboat. They came to participate in the annual "Xmas in July" festivities hosted at Pond Bay, Virgin Gorda.

Xmas in July is an annual maritime and community event that brings together residents, visitors, and marine stakeholders for a festive mid-year celebration. The event typically features recreational boating, organised social gatherings, and seasonal-themed activities. Traditionally hosted at Pond Bay, the occasion includes an onshore beach party with alcohol service, live stage performances, and a significant increase in vessel traffic in the surrounding waters.

The captain of the vessel held a United States Coast Guard OUPV/Six-Pack license. The Mojaito is a 2001 model 31-foot centre-console fibreglass boat powered by twin Suzuki 250-horsepower four-stroke outboard motors. It is registered in Puerto Rico (PR-3874-CC).

Upon arrival in the Virgin Islands, MV Mojaito cleared Customs and Immigration and docked at Village Cay Marina in Road Town, where it remained berthed until departure for the event.

Trip to Pond Bay

On 26th July 2025, the vessel departed from Village Cay with ten people on board, headed for Xmas in July at Pond Bay, Virgin Gorda. They arrived at Pond Bay around 11 a.m., and there were no reported issues with the vessel during the trip. Once at Pond Bay, the captain secured the vessel alongside other boats and began setting up for the day's activities. The captain was responsible for transporting people to and from the beach via the vessel's rib. Based on interviews conducted it was reported that the captain remained sober throughout the day's activities. However, others on board had a few drinks.

The activities continued throughout the afternoon and ended around 6:30 p.m. MV Mojaito departed from Pond Bay at approximately 7:30 p.m. The captain intentionally delayed departure by about an hour to avoid the peak outbound traffic.

The passage between Virgin Gorda and Tortola took place at night under fair weather conditions. The captain reported using a previously saved GPS track to navigate the familiar route, maintaining an estimated speed of 16 knots, with passengers stationed on both port and starboard sides as lookouts.

The Impact

At approximately 8:44 p.m., while MV Mojaito navigated through the Sir Francis Drake Channel, bound for Village Cay, the vessel struck a green steel lateral portside channel marker at a speed of around 26 knots. The captain realised that the impact had caused significant damage, and the vessel began taking on water quickly. The captain pushed the throttle forward and increased speed to try to expel the water. However, the structural damage was too severe, and the vessel continued to sink.

As the vessel continued taking on water, the captain quickly assessed the situation and instructed everyone on board to grab their life jackets and personal flotation devices (PFDs). The vessel's dinghy was deployed, and the captain assisted passengers in making a safe escape from the sinking vessel. Nearby vessels promptly came to the aid of the distressed vessel, and thankfully, no injuries requiring hospitalisation were reported.

Post Impact

Rescue and Salvage

MV Mojaito was ultimately retrieved by the diligent team at Husky Salvage & Towing, who transported the vessel to safety. Once at Nanny Cay Boatyard, the boat was carefully hoisted from the water and subjected to a thorough examination.

Environmental Conditions

At the time of the incident, weather conditions across the central Virgin Islands were reported as fair. Winds were light to moderate from the east, averaging between 10–15 knots. Sea conditions were calm to slight, with wave heights generally not exceeding one metre. Visibility was good throughout the day, estimated at over 10 nautical miles. Tidal movement in the Brandywine Bay area was minimal, and prevailing environmental conditions posed no unusual navigational challenges.

Captain and Passengers

The Captain

The captain of the vessel was 48 years old at the time of the incident, with approximately 30 years of diving experience as a commercial diver and boating experience. The captain also held an up-to-date USCG Medical Certificate and held the following credentials:

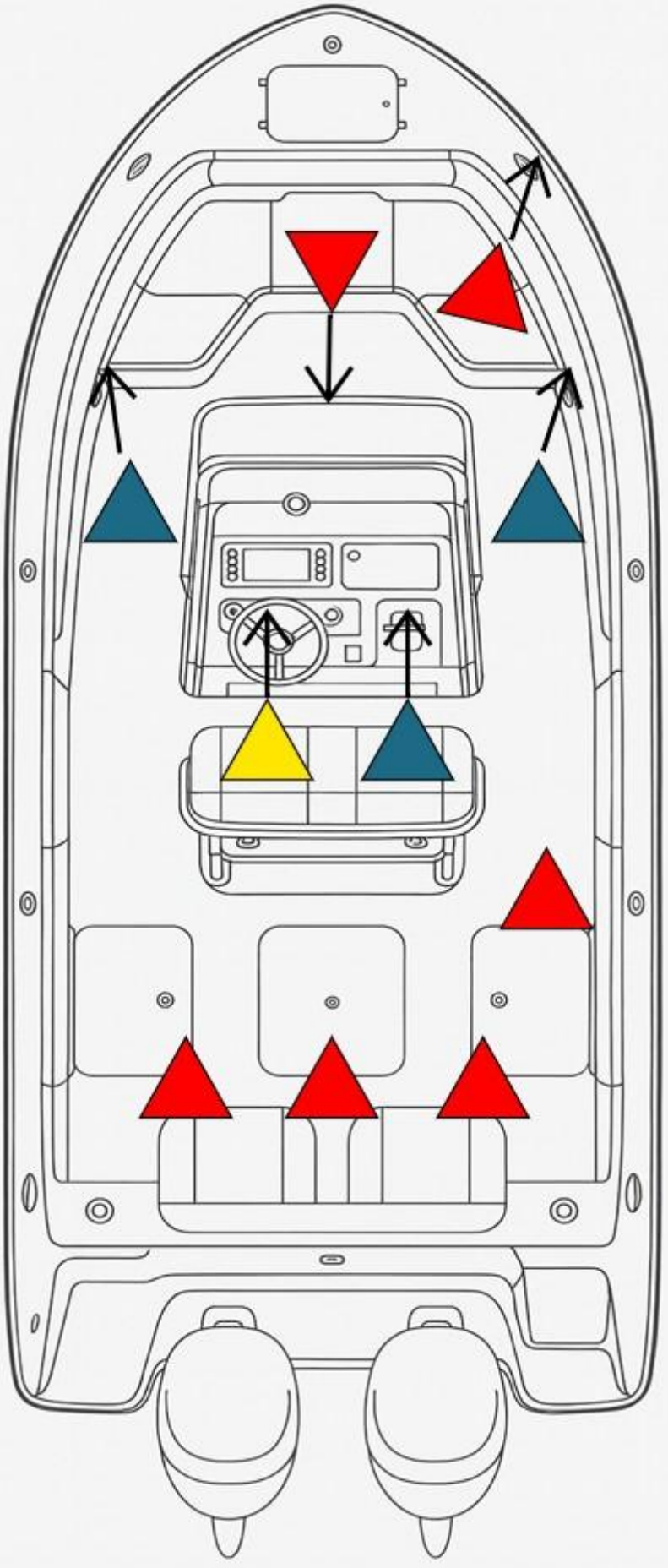
- USCG OUPV Captain's License (6-pack license).

The Passengers

The passengers consisted of nine persons, six males and three females, all with varying experience on vessels. The captain and passengers indicated that there were at least three designated lookouts at the time of the collision.

Table 1: Colour coded table with accompanying photograph showing positions of each passenger and arrows indicating directions of lookouts.

CAPTAIN/PASSENGERS	POSITION	GENDER/COLOUR CODE	RESULT OF COLLISION
Captain	Sitting at the helm controlling the vessel.	**Male/Captain**	Maintained control of the vessel until it sank
Passenger 1	In the centre next to the captain, looking out to the starboard side.	**Male/Lookout 1**	Thrown onto the deck but no significant injury
Passenger 2	Standing on the portside looking out.	**Male/Lookout 2**	Thrown onto the deck but no significant injury
Passenger 3	Standing on the starboard side of the vessel looking out.	**Male/Lookout 3**	Thrown onto the deck but no significant injury
Passenger 4	Lounging on the bench seat at the bow of the vessel looking toward the stern	**Female**	Thrown onto the deck but no significant injury
Passenger 5	Sitting on the bench seat at the bow looking out on the starboard side	**Female**	Thrown onto the deck but no significant injury
Passenger 6	Standing to the stern on the vessel, no designated task	**Female**	Thrown onto the deck but no significant injury
Passenger 7	Standing to the stern on the vessel, no designated task	**Female**	Thrown onto the deck but no significant injury
Passenger 8	Standing to the stern on the vessel, no designated task	**Female**	Thrown onto the deck but no significant injury
Passenger 9	Standing to the stern on the vessel, no designated task	**Female**	Thrown onto the deck but no significant injury



Safety Equipment

Overview

The vessel, MV Mojaito was equipped with standard safety equipment, including standard foam life jackets and flares, a small rigid inflatable boat (RIB), capable of carrying approximately four persons, and two chart plotters.

The vessel's kill cord was connected to the kill switch at the helm; it was not secured to the operator at the time of the accident.

Figure 5: Kill cord connected to Kill switch and console.

Damage to Vessel

Overview

Following the collision with the channel marker southeast of Brandywine Bay on the evening of 26th July 2025, MV Mojaito received extensive structural damage. The impact caused rapid flooding, which led to partial sinking before the vessel was salvaged and refloated. The nature and extent of the damage are consistent with a high-energy collision to the forward starboard bow of the vessel.

Recorded Damage

- The vessel sustained severe structural damage concentrated on the forward starboard bow, identified as the primary impact area.
- The stem was torn open from the waterline downward by approximately 2 feet, creating the principal point of uncontrolled water ingress.
- A substantial breach, measuring approximately 5 square feet, was present in the hull-to-deck joint and surrounding laminate just aft of the stem on the starboard side.
- An additional hole, approximately 8 inches by 8 inches, was observed in the chine about 6 feet aft of the stem on the starboard side.
- Internal structural tabbing was extensively fractured, with lateral tabbing broken in most areas within the forward section of the hull.
- A longitudinal crack approximately 8 inches in length was identified in the hull skin just below the chine, approximately 1 foot forward of the transom.
- Areas of substantial delamination were observed surrounding the impact zone, with contributing factors noted within the core material.
- Green paint transfer was evident on damaged areas of the hull, consistent with contact with a green lateral navigation buoy.

Figure 6: Severe damage to the bow as a result of the collision.

Figure 7: Damaged foredeck and railing

Figure 8: Front view of damaged vessel.

Paint Trace Transfer

During the inspection of the ship's starboard bow, green paint transfer was observed on several damaged areas of the hull. The colour and texture matched the green buoy. The paint showed a pattern from the impact, with more paint near the main point of contact and less toward the back. This suggests a glancing collision rather than a direct hit. The matching paint provides clear evidence that the damage to Mojaito is linked to the channel marker.

Figure 9: Green paint transfer observed along the damaged areas of the hull, consistent with the channel marker.

Figure 10: Green paint transfer observed on damaged areas of the hull.

Lateral Channel Marker

The green lateral channel marker is positioned south of the entrance of Brandywine Bay, Tortola, at an anchored position of 18°24.406'N, 64°35.009'W. This buoy marks the portside channel marker of the channel for large vessels entering Road Harbour from seaward. The channel marker aligns with the IALA Region B buoyage system used throughout the Virgin Islands.

Figure 11: Green lateral buoy (portside channel marker)

The channel marker is a large green steel can-type buoy structure with a tapered superstructure and top-mounted solar light, designed to provide nighttime visibility for approaching vessels from 10NM. It serves as a critical navigational aid for vessels transiting between Road Harbour and Virgin Gorda, delineating the safe water boundary near the reefed areas off Half Moon Point.

The buoy's position lies within a high-traffic route commonly used by inter-island ferries, private yachts, and recreational powerboats. Due to its placement, wave exposure and current activity are moderate to strong, particularly during periods of easterly trade winds or heavy vessel wake.

The buoy is designed with consideration for changes in wind, tide, and current. It pivots around its anchor, which is known as the watch circle (or swing circle). This circular area defines the range within which a buoy can move while attached to its mooring system, which includes the anchor, chain, and riser. As conditions change, the buoy pivots around its anchor and sweeps through this defined radius.

Aids to Navigation (AtoN)

Aids to Navigation (AtoN), as defined within the IALA Maritime Buoyage System (MBS), are visual, audible, or electronic markers established to assist mariners in determining their position, maintaining a safe course, and avoiding hazards. Under the IALA MBS, AtoN such as lateral buoys, cardinal marks, beacons, and lights are designed to provide a consistent, internationally recognised language of navigation that ensures vessel operators can safely enter channels, avoid reefs, and identify potential dangers.

The green lateral channel marker at Brandywine Bay falls under the scope of the IALA Standards and region B positioning. The effectiveness of these aids relies not only on correct installation and maintenance, but also on the mariner's ability to recognise and adhere to the buoyage system in use. In Region B, which includes the Virgin Islands, portside marks are green and starboard-side marks are red, forming the primary navigational framework for safe passage into harbours and channels.

The responsibility for safe navigation resides with the mariner through the appropriate use of AtoN in conjunction with official nautical documents and prudent seamanship, including voyage planning as defined in IMO Resolution A.893(21). The IALA Maritime Buoyage System provides guidance on the application of AtoN systems used worldwide for all users.

Figure 12: Extract from Google Earth showing the location of the portside lateral channel marker.

The buoy is equipped with a working green flashing light that flashes every six seconds (G FL G 6S), which is the standard IALA light description used to describe how a buoy's light flashes at night.

Fl	*Flashing* — the light is on briefly and off for a longer period.
G	*Green light* — indicates a portside lateral mark in IALA Region B (used in the Caribbean, Americas, Japan, and the Philippines).
6s	*Period of 6 seconds* — one complete cycle of light (one flash and the following darkness) takes 6 seconds in total.

Damage to Channel Marker

Overview

The buoy sustained structural deformation to the upper frame, abrasive grazing, and transfer of fibreglass fragments, consistent with high-energy contact from the collision. The damage pattern suggests the vessel's bow or upper hull made direct impact with the buoy's upper cone and frame before deflecting away. The incident resulted in material transfer, paint displacement, and metal bending, but no loss of buoyancy or total structural failure.

Figure 13: Bent frame due to impact

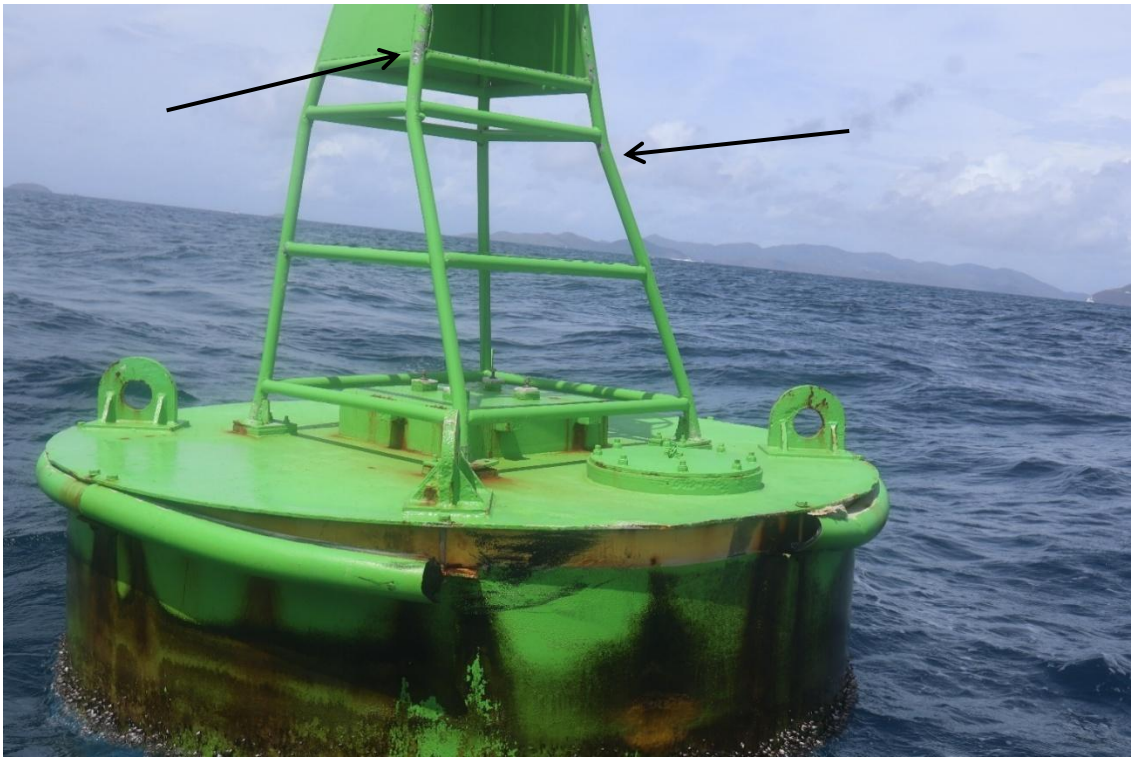


Figure 14: Pieces of fibreglass were observed stuck in the protective fender of the lateral channel marker's hull.

Figure 15: Grazing observed on the upper section of the lateral channel marker.

Legislation

International Regulations for the Prevention of Collisions at Sea 1972 (COLREGS)

Section 146 of *The Virgin Islands Merchant Shipping Act 2001* speaks about the implementation of the International Regulations for Preventing Collisions at Sea (COLREGs).

Rule 5 Every vessel shall at all times maintain a proper look-out by sight and hearing as well as by all available means appropriate in the prevailing circumstances and conditions so as to make a full appraisal of the situation and of the risk of collision.

Rule 6 Every vessel shall at all times proceed at a safe speed so that she can take proper and effective action to avoid collision and be stopped within a distance appropriate to the prevailing circumstances and conditions. In determining a safe speed, the following factors shall be among those taken into account.

International Organization for Marine Aids to Navigation (IALA)

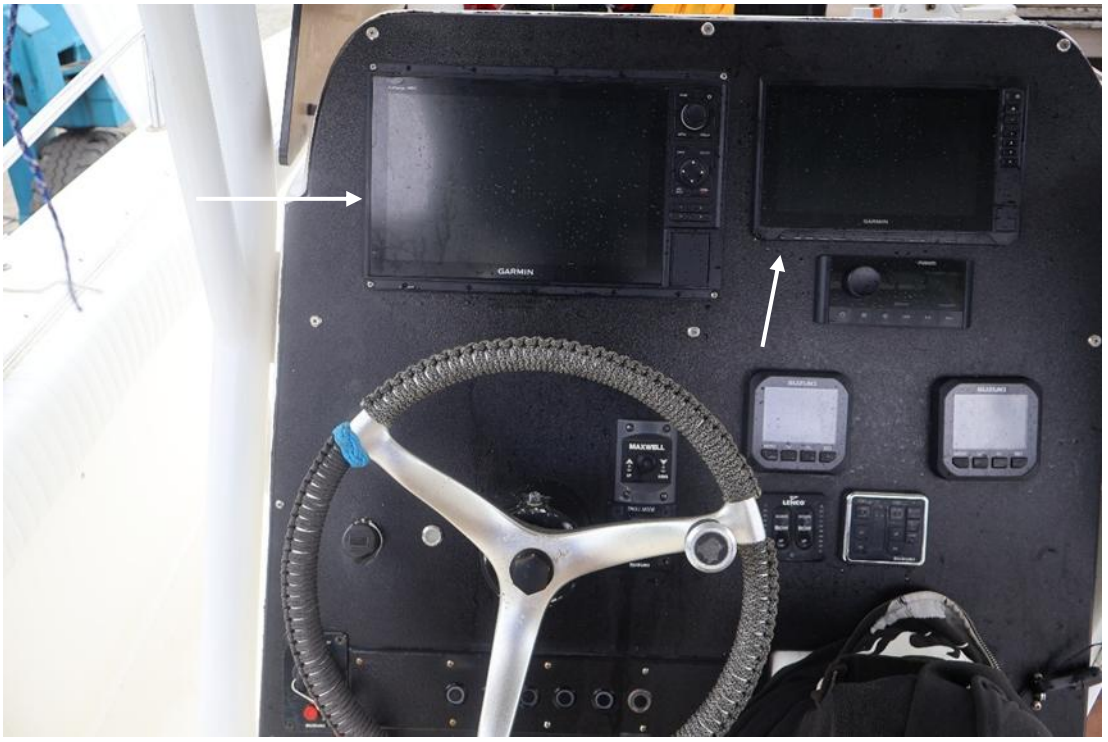
Section 165-170 of the Virgin Islands Merchant Shipping Act 2001 speaks about Aids to Navigation in accordance with the International Association of Lighthouse Authorities. The installation of Aids to navigation shall have due regard to the International Association of Lighthouse Authorities IALA Harmonised Buoyage “System B.”

Global Positioning Data (Electronic Chart Plotter)

Overview

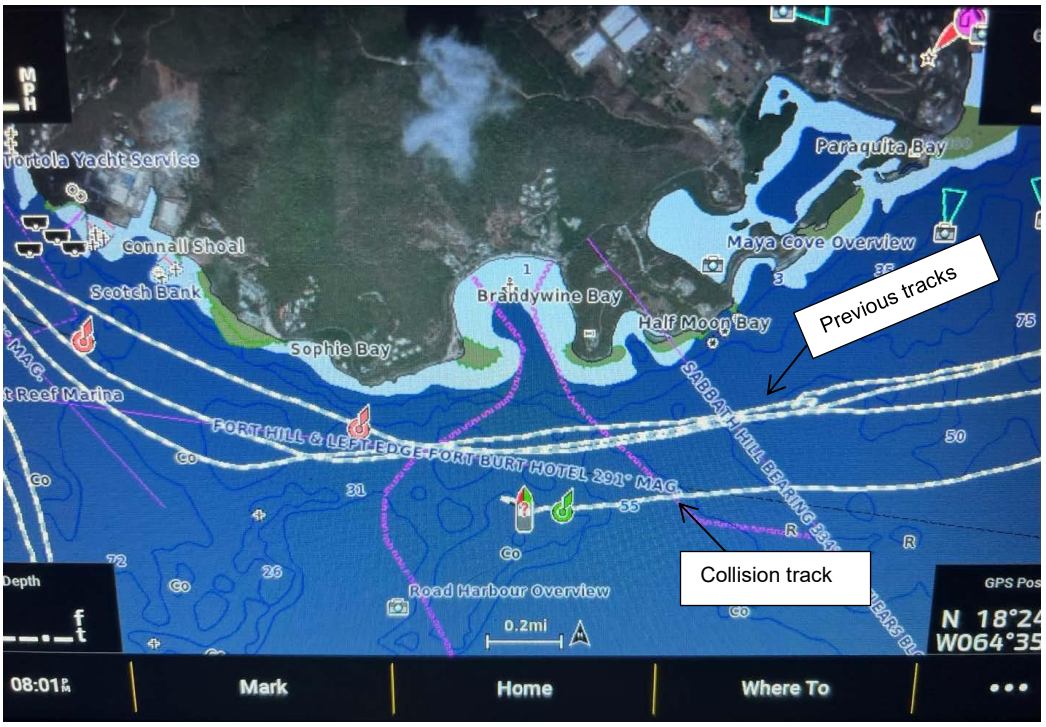
Three Garmin chart-plotters were recovered for inspection. The first, a Garmin GPSMap 1242sv, was found to be water-damaged and inoperative. The second device, a Garmin EchoMap UHD 74CV, was functioning but contained no relevant data saved. The third chart-plotter, a Garmin EchoMap UHD2 94SV, was operational and provided GPS track data that matched the incident time and position. The recovered data confirmed that the MV Mojaito was travelling at a near-constant speed and heading, consistent with the captain's reported course, thereby corroborating the physical damage pattern and forensic evidence.

Figure 16: Chart-plotters observed on console.



The captain's account indicated that the same tracks were used to and from the incident. Upon analysis of the electronic chart-plotter, separate tracks were observed to and from on the day of the incident. The data recorded on the night of the incident shows a single, distinct track leading directly toward the green lateral buoy, diverging from the usual inshore paths. This single route represents the vessel's actual course during the occurrence. It demonstrates a direct approach that placed the vessel on a potential collision path with the buoy, differing noticeably from the standard transit tracks visible on the chart.

Figure 17: GPS Chart-plotter tracks showing previous tracks used and the single track used on the night of the accident.



The GPS data also revealed that the vessel maintained a steady cruising pace of 26-28 knots with a consistent west-to-west-northwest heading. The track showed an almost straight line consistent with speed and heading for about 2.8 nautical miles. At 8:45 p.m., the vessel's speed decreased within three seconds by 11 knots, indicating that the vessel collided with the green port-hand channel marker at this time.

Figure 18: Chart-plotter tracks showing the vessel passing directly through the watch circle of the green port hand lateral channel marker.

Analysis

Aim

The purpose of the analysis is to assess the contributory factors and circumstances of the accident, which will then be used to make recommendations to prevent similar accidents from occurring in the future.

The Accident

An extensive investigation was conducted, which included interviews with individuals present during the incident (including the captain), a review of relevant evidence, and a careful analysis of information extracted from the electronic chart-plotter. The findings indicate that the vessel was proceeding on a familiar route between Pond Bay and Road Harbour. The captain maintained a speed of approximately 26–28 knots (30–32 mph) for about 2.8 nautical miles before the collision, on a direct path into the watch circle of the channel marker.

During the passage, the captain focused heavily on the chart-plotter device while navigating toward Village Cay through the Sir Francis Drake Channel. Although there were nine people on board, with at least four reputedly assigned as lookouts at the time of the accident, sufficient notice was not given to avoid the collision. The captain reported observing a light. The flash explained was consistent with the light of the channel marker in relation to the collision. However, the captain maintained that between the flash and the collision, the light was not seen again.

Marine weather data for the Sir Francis Drake Channel at the time do not indicate severe weather; available reports show east-to-east-northeast winds, moderate speeds, and clear skies.

There is evidence that a layer of Saharan dust occasionally affects the Virgin Islands, resulting in haze and reduced visibility. However, in the absence of a contemporaneous dust-haze advisory or measured visibility reduction specifically for that evening, the investigation cannot confirm that dust influenced this incident.

At the critical moment, the vessel lacked adequate time and space to change its course or reduce speed before striking the green lateral channel marker on the port side, which had an operational light.

The Chart-plotter

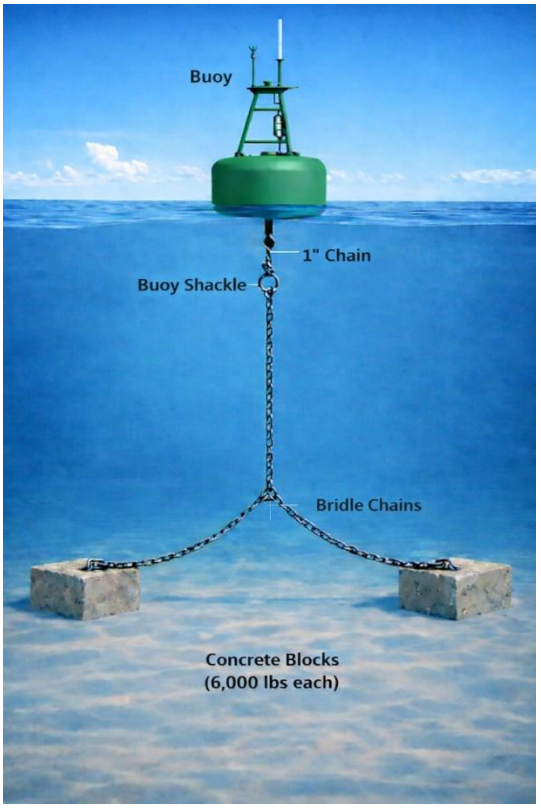
The captain primarily used the Garmin EchoMap UHD2 94sv as the chart-plotter. Data from the device indicated multiple historical tracks between Road Harbour and Virgin Gorda, reflecting regular routes. However, on the night of the accident, it recorded a single continuous track leading directly toward the

green lateral buoy, highlighting a deviation from the captain's usual paths. The chart-plotter's software was up to date and included light characteristic data for the marker and preserved track history.

Construction of Lateral Channel Marker

Figure 20: Image depicting a similar build from the seabed up to the surface of the green port hand channel marker.

(For illustration purposes only)



The green lateral channel marker south of Brandywine Bay is maintained by the BVI Ports Authority, which subcontracted Commercial Dive Services for maintenance. According to the maintenance and installation records from the BVI Ports Authority and Commercial Dive Services, the green lateral channel marker at Brandywine Bay was built using the following materials:

- Chain -Approximately 60 feet of one-inch, long link chain.
- Concrete blocks (Anchors) -Two concrete blocks, each weighing 6,000 pounds.
- Shackles -Five one-inch shackles to attach the blocks to the chain and channel marker.

The lateral buoy is anchored by a chain secured by a series of shackles. The first shackle connects the buoy to the chain. From there, the chain extends to a second shackle, which connects to a third shackle. The third shackle links chains from both anchor blocks, creating a bridle system that helps stabilise the structure.

This configuration aligns with standard installation practices for large navigation buoys, which is intended to withstand moderate to high sea states, tidal flow, and vessel-generated forces along the Brandywine Bay approach.

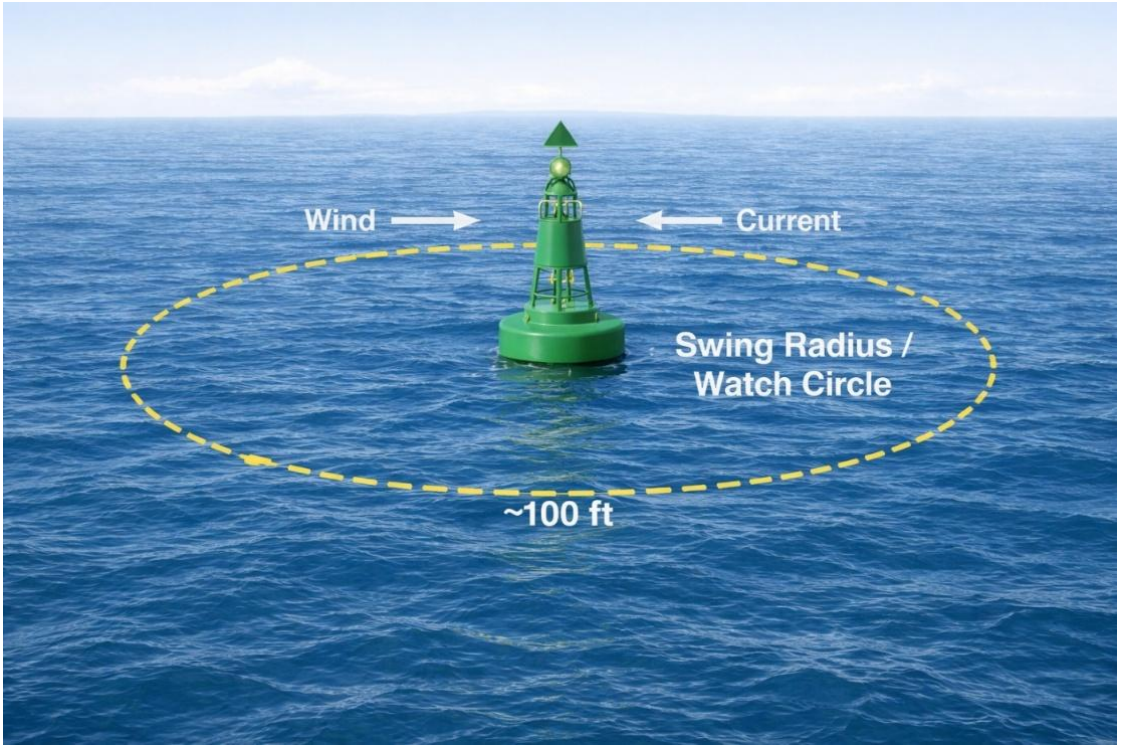
Construction Standards

Based on interviews, it was found that the building standards used to construct the said buoy were based on those of the Norwegian company Det Norske Veritas (DNV).

DNV establishes technical standards to ensure the safety, reliability, and environmental performance of ships and offshore installations. Through its classification rules, DNV sets requirements for buoyage system construction designs, all of which comply with internationally recognised navigational frameworks, such as the International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA) Maritime Buoyage System. DNV does not define a separate or alternative buoyage system for the general navigation of vessels at sea. Instead, its standards focus on the technical integrity, performance, and assurance of installations.

The Swing Radius (Watch Circle)

Figure 21: Imagine depicting potential movement of a buoy system with a swing radius



The watch circle of a lateral channel marker is the area on the water's surface where the buoy can move due to wind, current, wave action and tide, while still secured to the seabed. This area is determined by the effective length of the mooring system, which includes chain, rope, and swivels, as well as the vertical distance from the seabed to the buoy, taking tidal range into account. The radius of the lateral channel marker is estimated at 100 feet.

Position of Channel Marker on Impact

At the time of this accident, the marker was at a charted position of GPS coordinates N 18° 24.417 W 64°35.002. Based on the records of the vessel, the collision occurred at GPS coordinates N 18° 24.4189´ W 64° 35.0087´. Based on the charted position of the lateral buoy, the buoy was positioned on the surface of the water 35 feet away from its charted position at the time of the collision.

Navigational Notices

Navigational Notices play a critical role in ensuring safe passage for all mariners by providing timely updates on hazards, buoy relocations, construction activities, and other changes that may affect navigation. In the British Virgin Islands, Notices to Mariners are typically issued by the Virgin Islands Shipping and Maritime Authority (VISMA). These notices are essential for communication among vessel operators, charter companies, and the broader maritime community.

On the day of the accident, no notices had been issued regarding the movement of the channel marker at Brandywine Bay. This channel marker was relocated on February 7, 2025; however, mariners were not formally informed of the new position.

Conclusion

Safety Issues Directly Contributing to the Accident

1. Over-reliance on Electronic Navigation/Reduced Situational Awareness

The vessel operator focused heavily on the electronic chart plotter while navigating at night, resulting in reduced attention to visual cues, including the port hand channel marker flashing sequence and its increasing proximity.

2. Lapses in Maintaining Effective Lookout

Although lookouts were assigned, no one sighted the flashing lights of the lateral channel marker in sufficient time to warn the operator. The vessel maintained a constant high speed in darkness, reducing available reaction time.

3. High Transit Speed

The vessel maintained 26–28 knots in a known buoyed channel at night. At this speed, the maneuvering distance was insufficient once the buoy came into view.

Safety Issues Indirectly Contributing to the Accident

1. Absence of Notices to Mariners Regarding Buoy Relocation

The green buoy at Brandywine Bay had been moved on 7th February 2025, but no Notice to Mariners was issued by VISMA. This meant mariners were not given formal notice of the updated position.

2. Limited Public Understanding of Aids to Navigation (AtoN)

There is a general gap in mariners' awareness of IALA buoyage principles, light characteristics, and lateral buoy positioning in BVI waters, which contributes to misinterpretation or reduced vigilance.

Recommendations

BVI Ports Authority (BVIPA)

1. Improve Coordination with VISMA

Review the communication protocol with VISMA to ensure that maintenance actions, buoy movements, repairs, or observed anomalies are immediately reported so that Notices to Mariners are promptly issued.

Virgin Islands Shipping and Maritime Authority (VISMA)

2. Territory-wide IALA Public Awareness Campaign

Launch a territory-wide public awareness campaign to enhance mariners' understanding of the Region B Buoyage System and Light Characteristics of the International Association of Marine Aids to Navigation and Lighthouse and Authorities. The campaign should include correct interpretation of lateral marks, safe navigational practices, to reduce collisions involving channel markers and fixed aids to Navigation in the Virgin Islands waters.