International Port Security Program

Ship and Port Facility Security

Maritime Security Threats & Trends





Purpose

The goal of this lesson is to provide a general understanding of the concerns that motivate vigilance regarding maritime security and compliance with the ISPS Code.

Concerns

- Security is a global issue. Terrorists and other non-state actors have no boundaries.

- Even good security does not always deter a threat or terrorist action.

- Plans must be in place to respond to a security threat.





Objectives

DESCRIBE regional threats that may affect port facilities and commercial trading routes

DISCUSS incidents that have impacted vessels and port facilities.

DESCRIBE recent maritime security threat vectors for port facilities.

DISCUSS reasons effective security measures benefit port facilities.





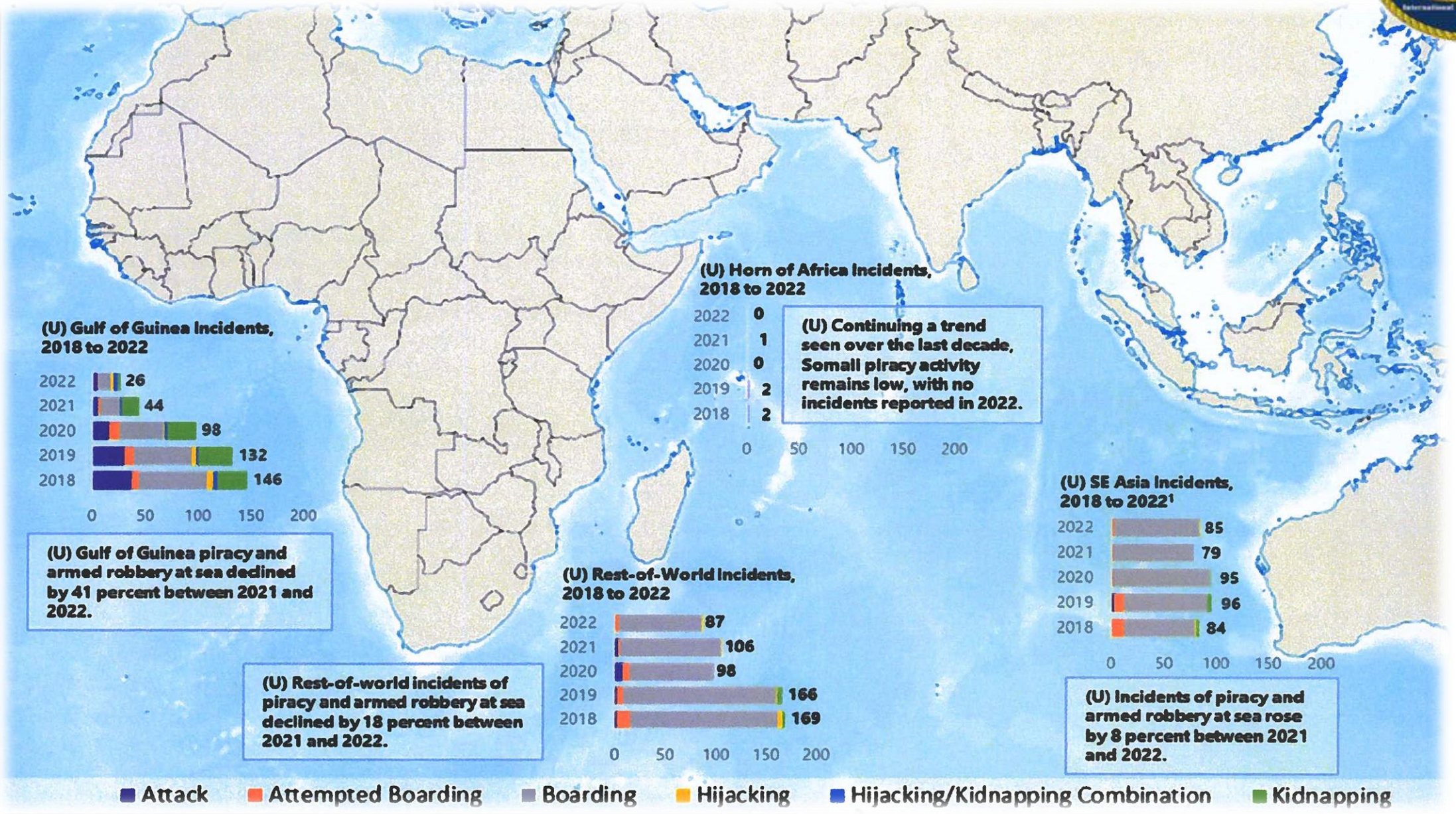


Threats

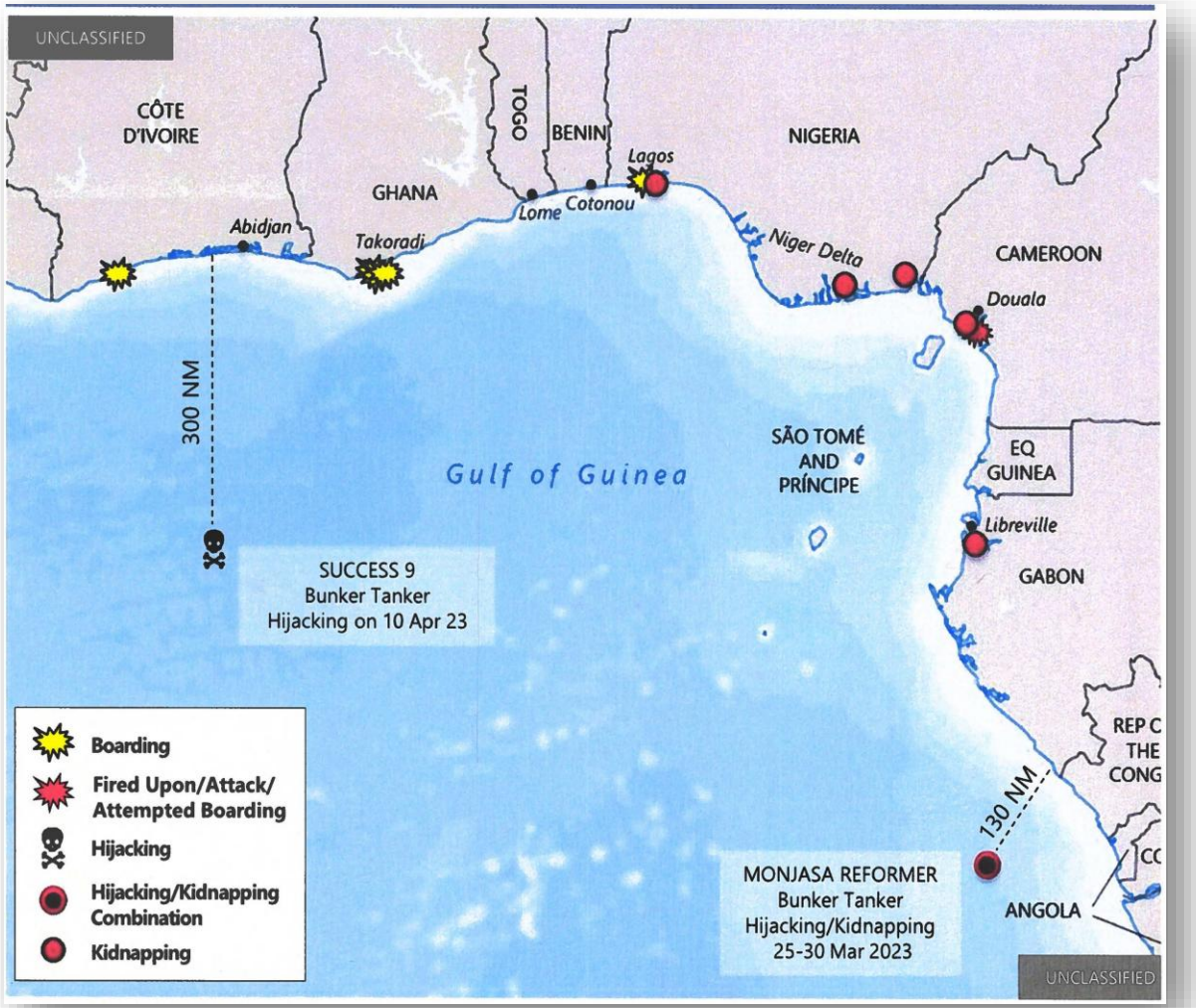
Threats may come from:

- Piracy
- Stowaways
- Drug smuggling
- Cyber Network Intrusions
- Environmental Damage
- Drones
- Insider Threat
- Terrorists
- What else?

Piracy – Worldwide: Annual Worldwide Threat to Shipping 2022

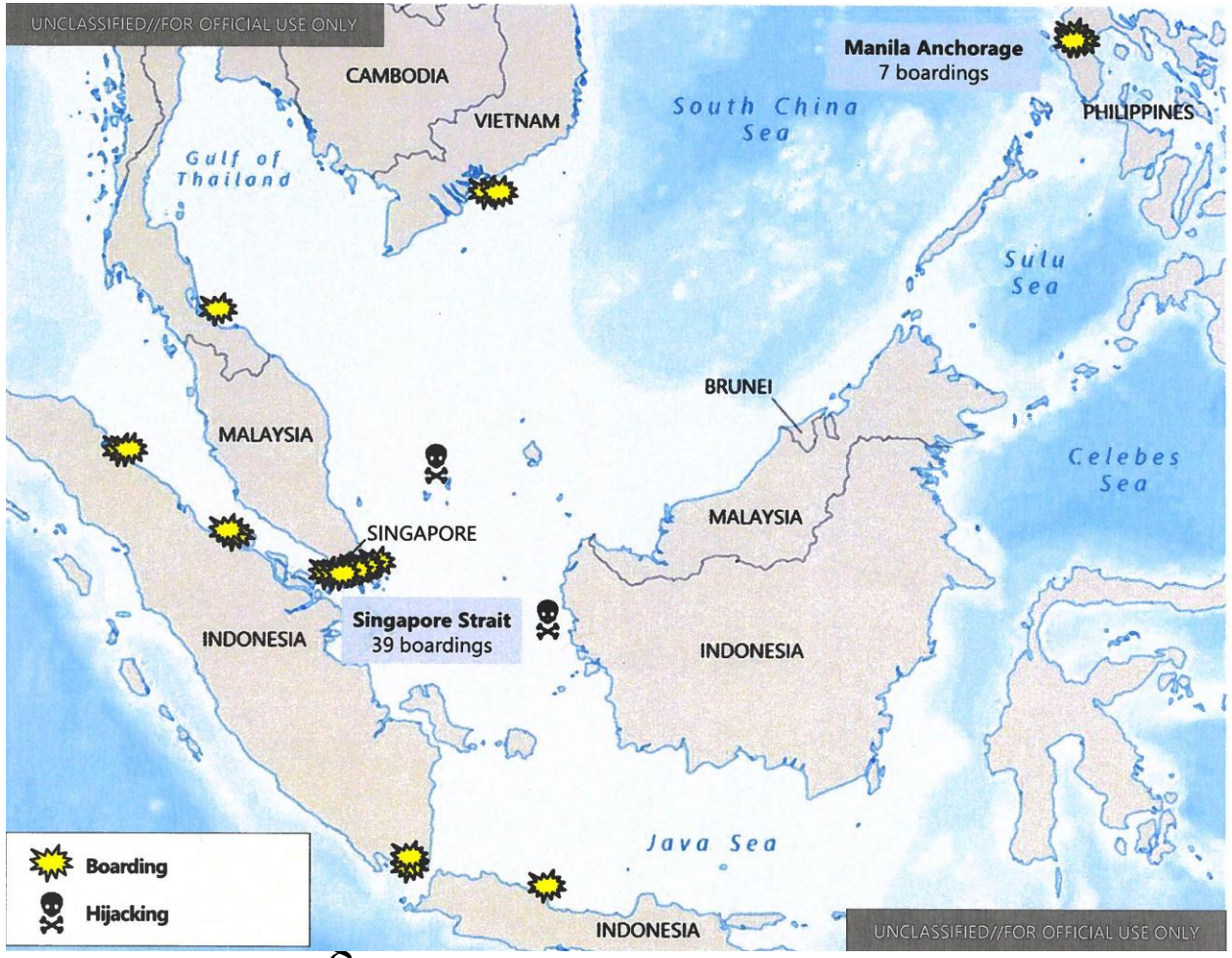


Piracy – Gulf of Guinea 2023 Mid-Year Review of Piracy and Armed Robbery Against Ships

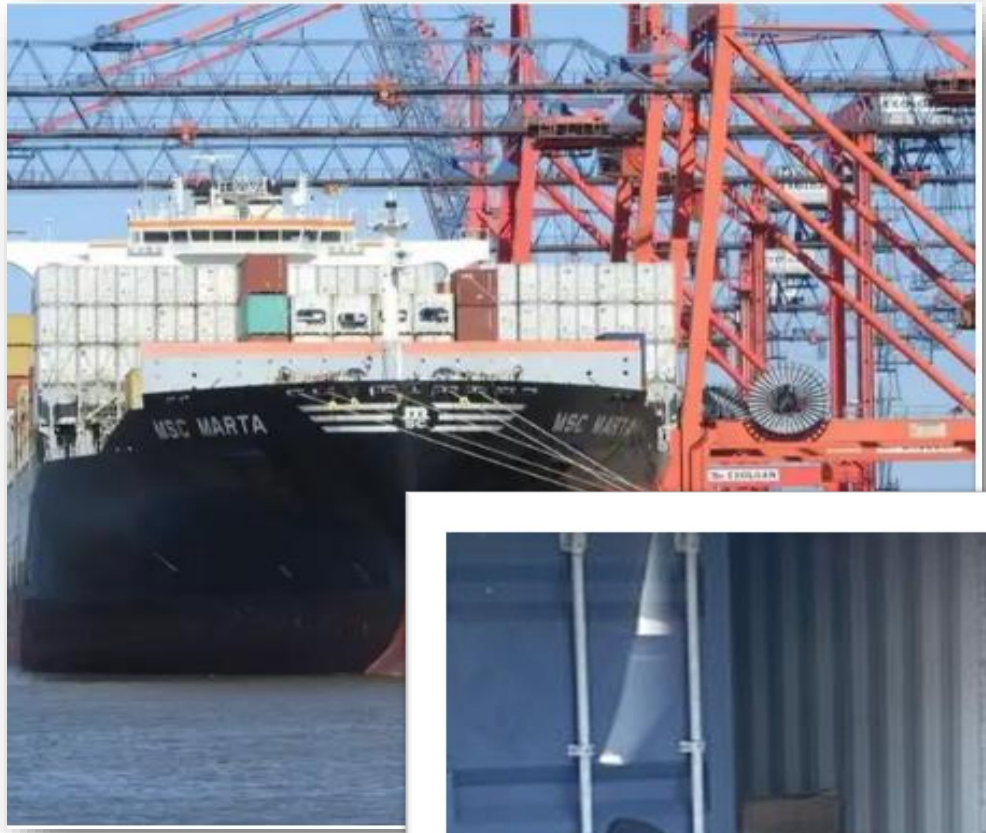


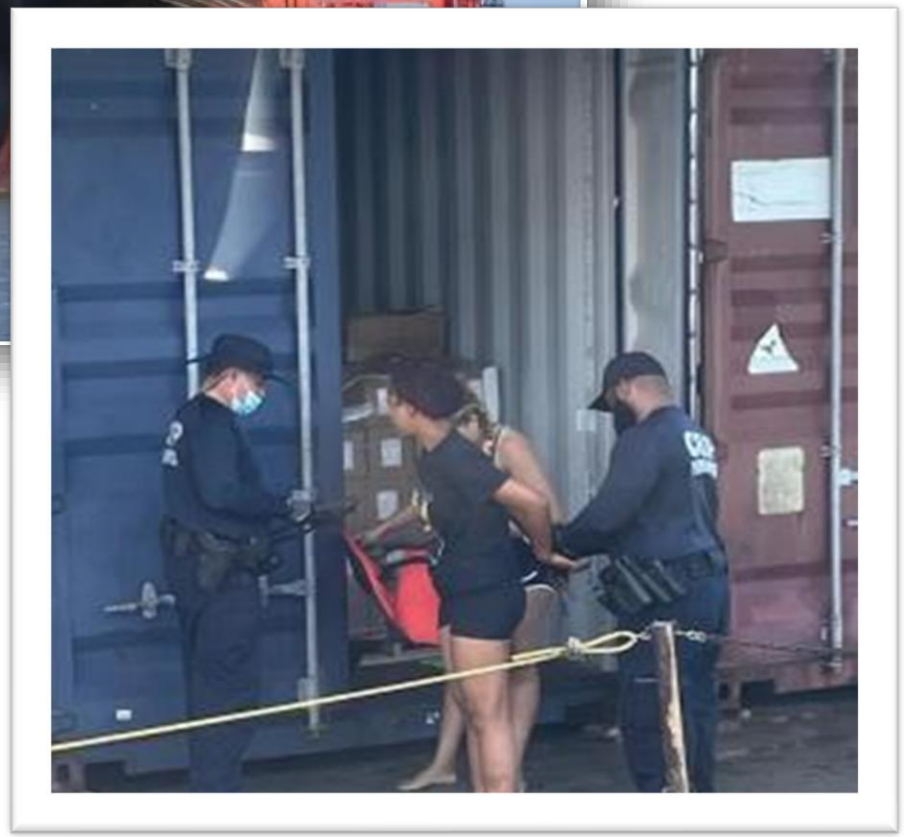
- Gulf of Guinea: 2023
- Pirates kidnapped 14 seafarers in three incidents. Two of the kidnappings targeted bulk carriers in anchorages (Douala, Cameroon and Libreville, Gabon)
- Successful 2023 kidnapping operations may encourage pirate groups to pursue similar operations in 2024
- Bunker Tankers Targeted: Pirates highjacked bunker tankers on two occasions in 2022. Hijacking took place far the Niger Delta, and beyond the range of coastal state naval/security patrols.
  - Large amounts of cash carried onboard
  - Low freeboard of the vessels
  - Slow speeds, low level of situational awareness during bunker operations

Piracy – Southeast Asia 2023 Mid-Year Review of Piracy and Armed Robbery Against Ships



- Most incidents took place in territorial waters for Indonesia. Bulk carriers were most frequent targets
- Singapore Strait Traffic Separation Scheme (TSS): 39 incidents total from Jan – June 2023. 28 of these involved vessels underway in the eastbound lane of the Singapore TSS
- Increase number of attacks by 30 percent (from 44 to 63) when compared to Jan – Jun 2022.



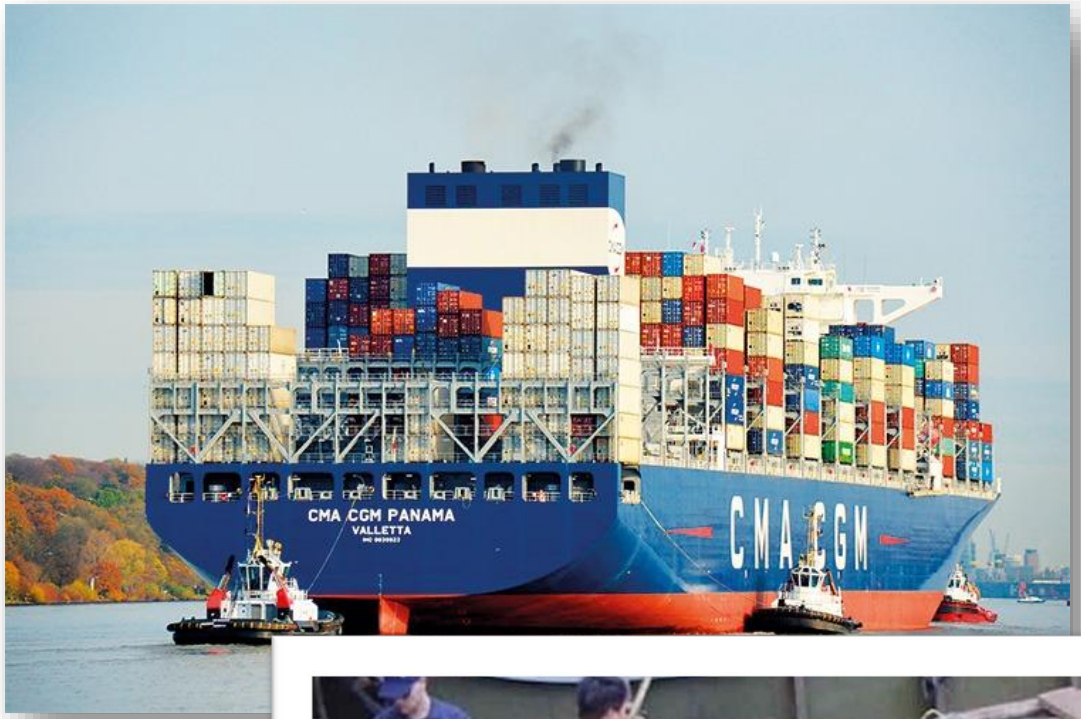


Stowaways/Narcotics Smuggling

Puerto Rico: 2023

- U.S. Customs and Border Protection and U.S. Coast Guard apprehended 18 migrants in Port of San Juan
- Migrants were found with one duffle bag containing 10 bricks of cocaine (11.5 kgs) and one firearm.
- Estimated value of cocaine is USD $264,500

Stowaways





Port of Colombo, Sri Lanka: April 2023

- Vessel CMA CGM PANAMA. 48 hours after leaving the Port of Colombo, a cadet was conducting a routine round of the ship and spotted an individual (stowaway) who appeared to be wearing stevedore coveralls.
- Stowaway stated that there were three other stowaways hiding between the containers throughout the cargo holds
- Four individuals confirmed as stowaways were wearing Port of Colombo stevedore coveralls, hard hats, safety boots, and reflective vests.
- Stowaways boarded vessel, pretending to work until the ship departed.
- This was an inside job within the Port of Colombo and the "agent" most likely worked at the port and was able to obtain fake credentials and uniform items for stowaways in exchange for money.

Drug Smuggling

CSI Guayaquil 3,748 kg Cocaine Seizure

- On December 14, 2024, CSI Guayaquil received information from members of the Ports and Airports Investigation Unit (UIPA) and the National Police Anti-Narcotics Inspection Team (UNAC) regarding a contaminated container at the Port of Naportec in Guayaquil, Ecuador.
- UIPA selected container SZLU9008978 for a physical exam and when examined a total of 3,864 rectangular-shaped bricks were found comingled in cargo. UNAC field tested the **bricks'** contents using the Tanred Scott test kit, which yielded positive results for cocaine hydrochloride.
- The total net weight of narcotics found was 3,748 kg. The container's commodity was listed as bananas and was scheduled to be loaded on the M/V MSC Vidisha R. The container's routing was listed as Guayaquil, Ecuador with **final destination being Antwerp, Belgium.** CSI GYE found no arrests, detentions, or nexus to the United States.



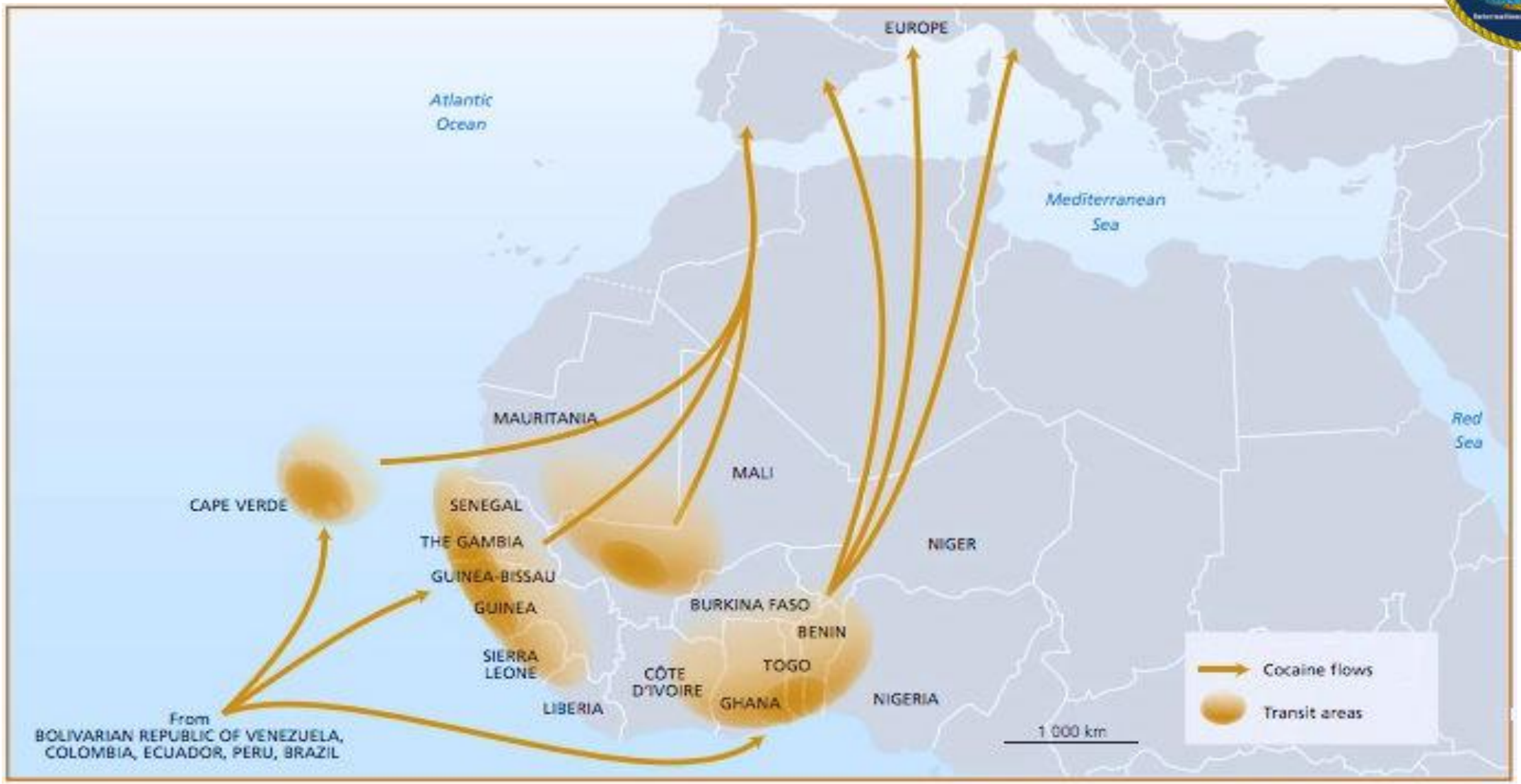


Drug Smuggling

- June 2019: 17 tons of cocaine (street value of $1 billion) was seized from multiple cargo containers on a cargo ship at the Packer Marine Terminal in Philadelphia. Ship was headed from Chile to Europe when the drugs were found after authorities received a tip.
- Two crew members admitted taking part in loading the cocaine from 14 separate boats while en route at sea.



Shifting Smuggling Routes



Cocaine Smuggling Routes: West Africa

Shifting Smuggling Routes





Cocaine Smuggling Routes: Belgium, Netherlands, and Spain

Drug Smuggling

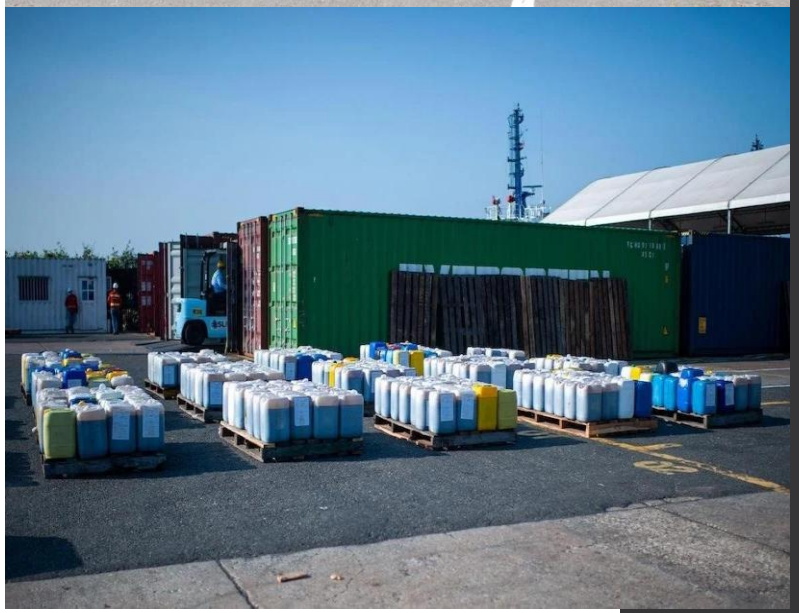
- **High-Volume Containerized Transshipment Hubs**
- Traffickers exploit massive commercial transshipment ports in the Caribbean to blend illicit cargo into legitimate global trade networks.

  - **<u>The Jamaica-to-Europe Conduit</u>:** Major hubs like the Kingston Freeport Container Terminal face ongoing exploitation. In late 2026, international partners intercepted two containers arriving from Honduras destined for Belgium, seizing approximately **1,450 kilograms of cocaine**

  - **The Haitian Epicenter:** Driven by political instability, Haiti has increasingly become a critical logistics hub. Cartels use it for multi-ton drop-offs—such as a historic 1,045 kg cocaine seizure off Tortuga Island—before using transshipment routes through other Caribbean ports to smuggle the cargo into Europe

  - **<u>Agricultural and Commodity Concealment</u>:** Cartels frequently mix drugs directly into regional bulk exports. In late 2026, a massive **7.6 tons of cocaine** bound for Europe was seized at a major Caribbean terminal after K9 teams found the drugs completely blended into powdered panela (unrefined cane sugar) inside hundreds of cargo sacks





Drug Smuggling

High-Speed "Go-Fast" Vessels and Narco-Subs

- The vast, porous waters of the Caribbean Sea are heavily traveled by small, low-profile vessels trying to outrun or slip under radar detection
- **The Venezuela-to-Dominican Republic "Bridge":** Traffickers utilize high-speed vessels to move multi-ton shipments from Venezuela northward. A notable joint anti-narcotics operation south of Isla Beata destroyed a go-fast boat acting as a "bridge" to route 1,000 kilos of cocaine into the Dominican Republic
- **Semi-Submersibles**: Transnational criminal networks, including gangs like Tren de Aragua (TdA), deploy low-profile semi-submersible vessels ("narco-subs") to move immense volumes of cocaine through international waters, prompting heavily kinetic maritime interdictions by multi-national forces.
- **The Eastward Shift**: Aggressive U.S. and allied maritime patrols around the Central Caribbean and the ABC islands (Aruba, Bonaire, Curaçao) have forced traffickers to constantly alter their paths, shifting some go-fast corridors further east toward Guyana, Suriname, and smaller regional deep-water ports





Drug Smuggling

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Drug Smuggling

- Rise of Synthetic Drugs and "Molly“
- Inter-Island Inter-Port Contraband (Small Commercial Vessels)





Drug Smuggling

Tourism Ecosystem Exploitation (Cruises and Commercial Flights)

The Caribbean's heavy reliance on tourism creates high-volume passenger traffic that smugglers attempt to hide behind.



- **Luggage & Commercial Flights**: Individual couriers regularly attempt to pass through airport security with narcotics disguised inside commercial food packaging or personal items, such as recent multi-million-dollar luggage seizures at Sangster International Airport in Jamaica.

- **Cruise Ship Infiltration**: Federal border agents utilize aggressive outbound screening operations (like Operation Temptation) at major cruise terminals to intercept sophisticated contraband, stopping individuals from boarding regional cruise liners with disguised ecstasy, MDMA, and *cannabis disguised as normal confectionery, mints, and chocolate*







Insider Threat

Transnational Criminal Organizations hire people to traffic their drugs across vast bodies of water.

Often pay crew members to look the other way while they load and unload shipments on coastal freights.

Insider Threat

- **The Container-Switching Syndicate** (Kingston, Jamaica)
  - The "Rip-On / Rip-Off" method relies entirely on insider collusion. In August 2026, the Jamaica Constabulary Force's Firearms and Narcotics Investigation Division (FNID) launched a multi-agency crackdown at the Kingston Container Terminal following a massive $1 billion (JMD) cocaine seizure
  - Inside threat vector: multiple port employees were arrested for operating a highly coordinated drug-smuggling syndicate within the facility.
- **Multi-Role Airport Logistics Operations (**Puerto Rico**)**
  - Inside Threat: 26 + individuals were charged, including major airline employees, airport cleaning staff, and airport restaurant workers.
- **Transshipment Coordination Hubs (Port of Balboa, Panama Context)**





Insider Threat

Direct Manifest & System Tampering

- Advanced insider threats involve white-collar employees who manipulate data rather than physical luggage.
- Inside Threat: Customs manifest clerks, logistics data loggers, and IT operators managing regional Port Community Systems (PCS).



Private Vessel Infiltration (Inter-Island Mules)

- Even down to smaller, regional supply vessels operating between smaller islands, crew members act as mobile insider threats.



Cybersecurity

United States: 2021

- Coast Guard Cyber Command reported that 2021 experienced a 68% increase in reported maritime cyber incidents

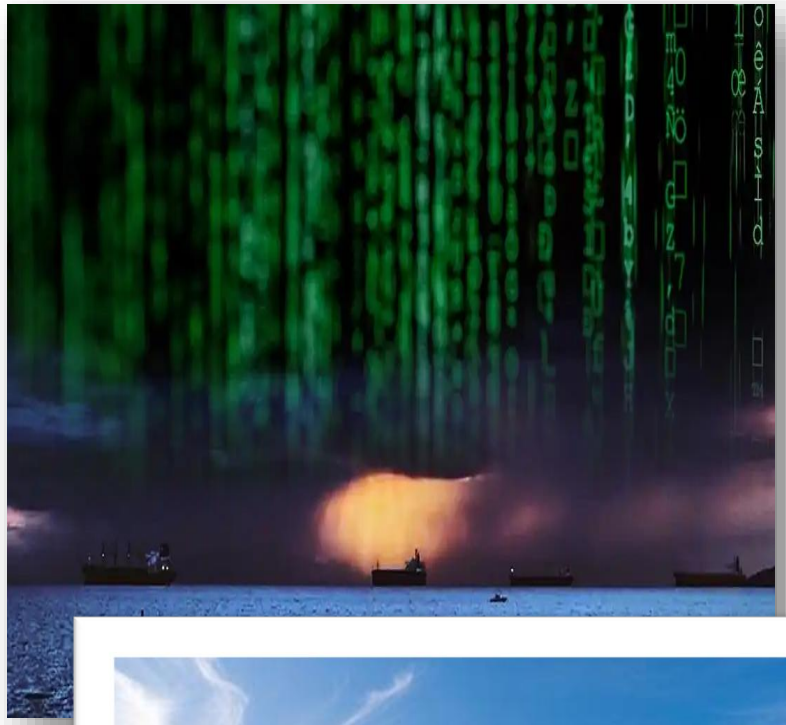






Cyber Security Threats Challenge International Shipping Industry

- Colonial Oil Pipeline Company (CPC) in the U.S. in May 2021
  - The 9,000km long Colonial Pipeline, which connects some 30 oil refineries and nearly 300 fuel distribution terminals
  - Petrol shortages across the eastern U.S. CPC paid a $4.4 million ransomware demand to hacking group “DarkSide” in return for getting its systems back online.
- The shipping community has grown more alert to cyber risk over the past couple of years & in the wake of the 2017
  - NotPetya malware attack that crippled ports, terminals and cargo handling operations.
- Geopolitical conflict is increasingly played out in cyber space and has led to more spoofing attacks on ships.
- Worst case scenario: Terrorist attack or nation state group targeting shipping in a bid to inflict damage or major disruption to trade. Ie. blocking a major shipping route or port.





Cyber intrusions in Caribbean ports and their broader maritime logistics supply chains

- 2026 Americas Coordinated Ransomware Campaign
  - 2026, a widespread, coordinated ransomware campaign systematically targeted freight, logistics, and port gateway providers across the Americas.
  - The attack successfully locked terminal operators completely out of their automated systems, forcing ports to fall back on manual paper manifests and clipboards to track container movements.
- Multi-Sector Supply Chain Ransomware (Qilin & Weyhro Gangs)
  - Ransomware syndicates like Qilin and Weyhro launched highly aggressive double-extortion campaigns throughout 2024 and 2025 across islands like Aruba, Curaçao, Barbados, and Trinidad & Tobago.



- Regional Geopolitical Electronic Warfare (GPS Jamming & Spoofing

  - December 2025: Escalating regional tensions between the United States and Venezuela triggered a massive, defensive military-grade GPS jamming and spoofing campaign across the Caribbean Sea.

- Direct Supply-Chain Financial Breaches (The JETS Attack)

  - Because Caribbean ports are deeply integrated with regional financial clearinghouses for custom duties, tariff processing, and shipping payments, *breaches on local financial networks directly halt cargo flow.*





Cyber intrusions in Caribbean ports and their broader maritime logistics supply chains

- Ransomware Incident Response Plan(IRP) tailored for a Caribbean terminal
  - Develop a Regional IRP plan
    - Phase 1: Immediate Triage & Isolation
    - Phase 2: Continuity of Port Operations
    - Phase 3: Forensic Assessment & Eradication
    - Phase 4: The Ransom & Legal Decision
    - Phase 5: Clean Recovery & Rebuild
    - Phase 6: Post-Incident Hardening
- Continuity of Operations





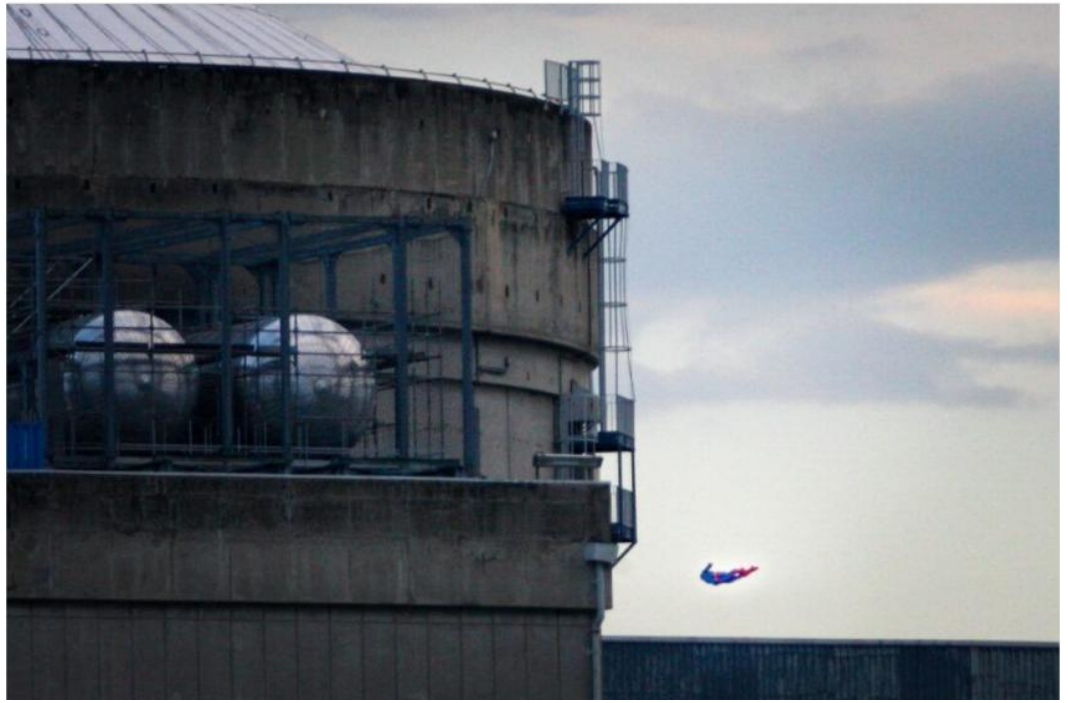
Drones

Saudi Arabia: 2019

- 25 Drones were used to attack Saudi Aramco oil processing facility
- Oil production cut by half, 5% of global oil production, destabilization of global markets

Marine Activists

- Environmental conservation groups attempt to hinder commercial operations in an effort to bring awareness to their concerns about the environment.
- Greenpeace – France, 2018, nuclear plant
- Sea Shepards Conservation Society – 2010 – Antarctica's Commonwealth Bay, Japanese whaling vessel













Civil Unrest

- Haiti -2020s – Port-Au-Prince
- South Africa -2021 – Durban and Richards Bay
- United States -2011 – Portland
- Papua New Guinea- 2024 – Port Moresby







Threat Vectors

The incidents discussed show many different threat vectors:

- Vehicle-bourne IED
- Small boat VBIED
- Standoff attack
- IED on vessel
- IED in facility
- Hijacking
- Active shooter

Passenger Ferry Attacks



Davao City, Philippines: 2003

- A bomb exploded near a barbecue stand in a row of food stalls by the Sasa Wharf Ferry
- The Filipina Princess and Superferry 15 were pier-side at the time of the attack

Passenger Ferry Attacks





Philippines: 2004

- Superferry 14 underway off coast
- Small television with 3.6 Kg of explosives inside detonated, resulting in blast and fire with 116 killed or missing

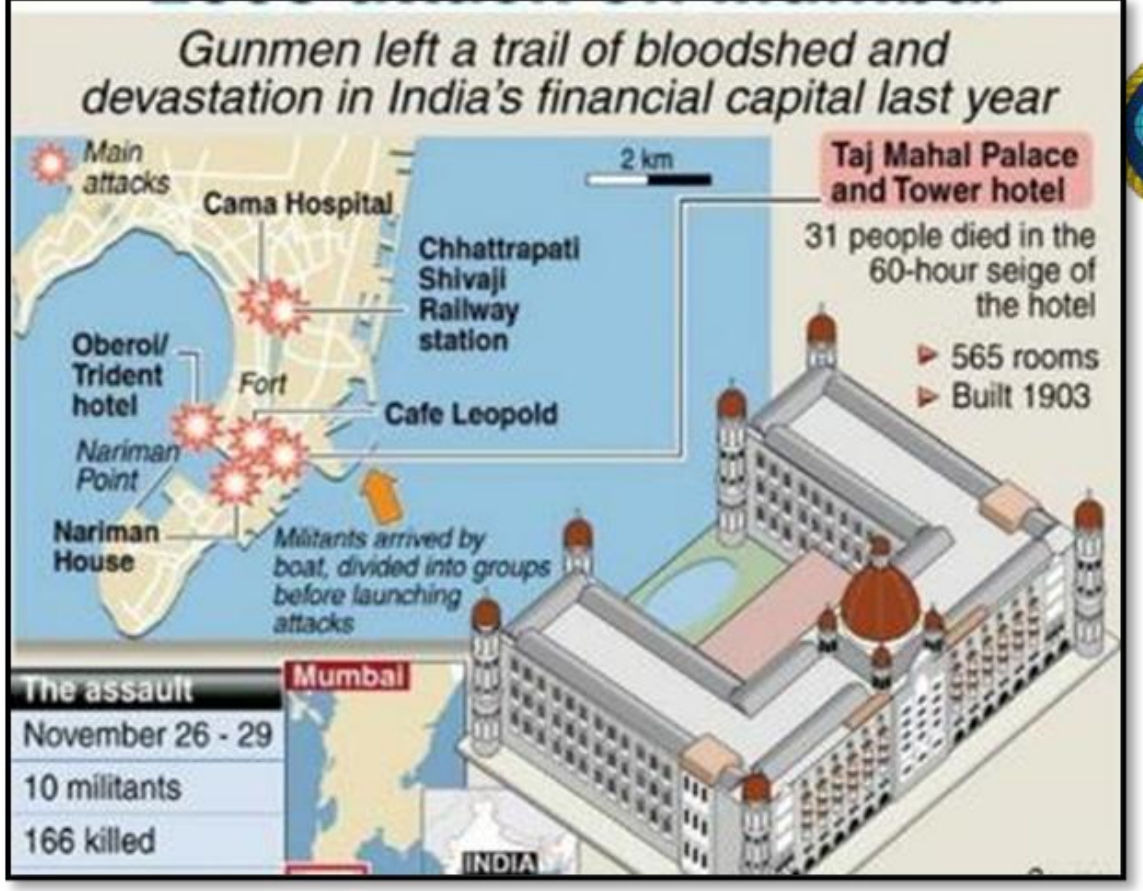


Bulker Vessel Attack

Red Sea: 2025

- On July 7, the bulker *Eternity C* was transiting about 50 nautical miles southwest of Hodeidah when it was assaulted by personnel in multiple skiffs. The vessel was then hit by multiple missile strikes, disabling its engine and causing it to flood.
- 10 rescued
- 6 crewmembers pulled from water and taken by Houthi militants to Yemen.
- 9 dead





Small Boat Waterside Attacks

Mumbai, India: 2008

- Militants hijacked vessel, then used small boats to land at fishing village
- Open sources state that local fishermen asked militants who they were at landing, and reported the incident to police





Security Benefits

Good security provides for mitigation of threats and effective response to incidents that may occur.

Even if a crisis is caused by an accident or natural disaster, a culture of good security prepares personnel for a better response.

Summary

Maritime security threats are variable, real, and require vigilance to prevent illicit action and respond to incidents.

Compliance with the ISPS Code, including an accurate Port Facility Security Assessment, current Port Facility Security Plan, and demonstrated proficiency in drills and exercises all contribute to effective anti-terrorism measures.