TMC MARINE

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RED SEA ATTACKS

latest wave of Suez and Panama Canal disruptions

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Ship owners, operators and charterers are facing tough decisions with the disruption to two of global shipping's major trade routes. Captain Neale Rodrigues and Chief Engineer Lionel Fernandes outline the risks.

Regional conflicts in the Middle East are adding strain to shipping already under pressure thanks to Black Sea restrictions and the drought hit Panama canal.

The Suez Canal, the shortest sea route between Asia and Europe, handled approximately 12-15% of global trade in 2023. All vessels transiting through the Canal must pass via the Bab-al-Mandab Strait and the Red Sea, where Houthi rebels have been targeting vessels, most recently the British cargo ship Rubymar, forcing operators to reconsider the viability of the route.

The United Nations Conference on Trade and Development (UNCTAD) estimates weekly transits decreased by

42%

over the last two months of 2023 (compared to 2022).

THE ALTERNATIVE IS NOT WITHOUT CONSEQUENCE

– re-routing vessels via the Cape of Good Hope increases the distance of a Singapore to Rotterdam voyage by 3,500 nautical miles, taking 10 to12 days longer. Dubbed the “Cape of Storms”, the area is also known for its adverse weather, particularly in the winter months, and abnormal waves due to the swell and fast current moving across deep troughs on the seabed.

Severe drought conditions and a resulting reduction in water levels have led to the Panama Canal Authority significantly reducing the number of vessels transiting the Canal. The number of vessels per day has been reduced to 18 as of the 1st of February 2024, down from a normal value of 34-36. Vessels without bookings therefore face “indefinite delays”.

One of the alternative options is for vessels to re-route via Cape Horn exposing them to waves from the Southern Ocean.

WHAT ADDITIONAL RISKS ARE INTRODUCED?

“Having experienced sailing around the Cape in varying conditions, I believe that it is essential to expect and plan for the worst-case scenario, and to ensure that everyone, on board and ashore, is fully aware, suitably trained and adequately prepared.”

Master Mariner Captain Neale Rodrigues

“As a Technical ship manager for container ships, I am aware of the risks to the vessel’s machinery, its crew and the cargo on board when operating and routing around the Cape of Good Hope. The vessel is likely to experience heavy weather which can overload the main engine with increased rolling and pitching that could lead to problems, potentially leading to a blackout. The vessel would need to properly consider their ISM “preparation for heavy weather checklist” which would include stringent lashing requirements on deck and ensure effective guidance for weather routing throughout the voyage.”

Consultant Marine Engineer Lionel Fernandes

Lengthy detours require additional operational planning.

KEY AREAS TO BE CONSIDERED INCLUDE:

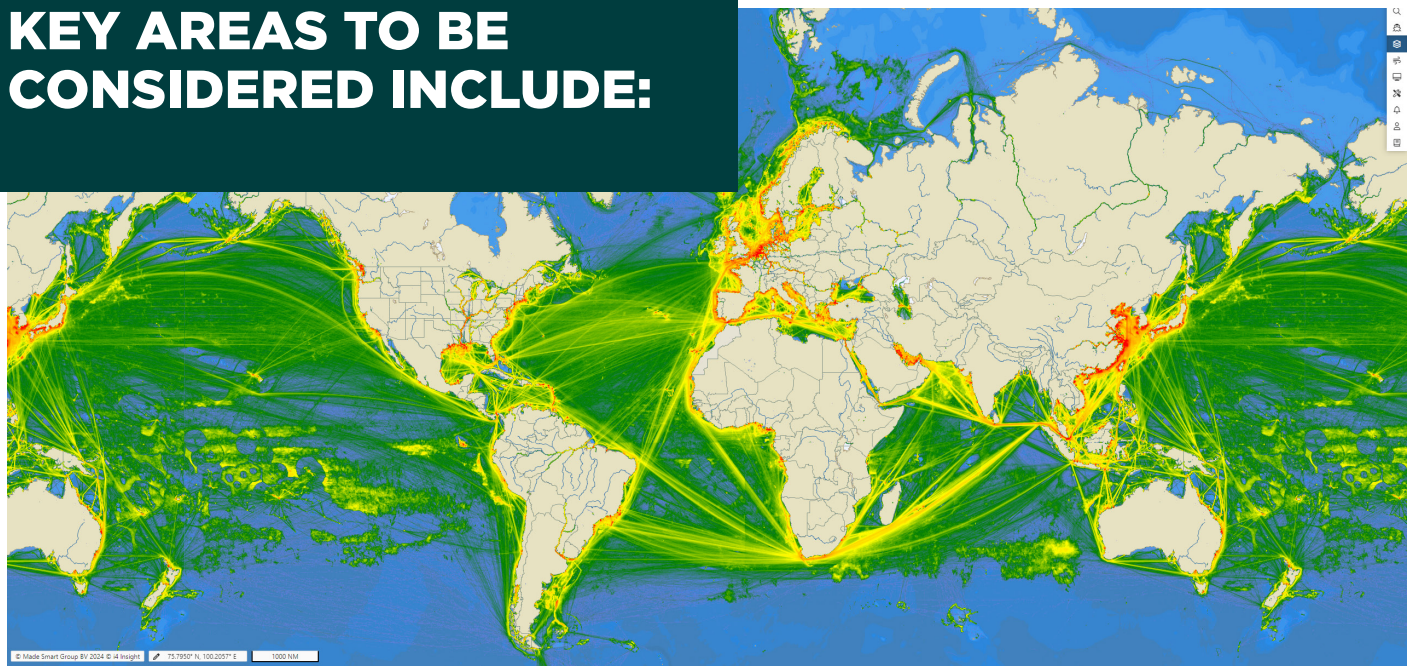

Image courtesy of madesmart.nl

Cargo stowage and securing
An enhanced assessment of stowage and securing plans, paying special attention to deck cargos and areas most affected, can help account for increased environmental conditions.

Deck cargos require special consideration as these are likely to be particularly affected and additional seafastening or other mitigations may be required. Depending on the cargo type, additional preservation measures may need to be planned for and implemented to mitigate the chance of degradation.

There is also an additional risk of movement of heavy spares in the engine room and technical spaces which needs to be anticipated. An appropriate level of diligence is hence required in preparation for additional heavy weather.

Routing
Crews used to operating via the canals may be less experienced in transiting round the Capes. It may be prudent to reassess routing procedures on board and to implement a weather routing system for the extended voyages – both Capes are prone to fog as well as localised weather systems and currents. Inshore routes are likely to be preferable but run the risk of bringing vessels into proximity with local traffic.

Speed and Performance
Longer voyage durations and the potential increased frequency of heavy weather make “speed and performance” claims a key commercial risk. Effective record-keeping is necessary in anticipation of such a claim.

Engine operation
Increased voyage durations will take a toll on machinery, so an enhanced maintenance and inspection regime is advised. Heavy weather may also impact routine maintenance and remedying breakdowns. The rapid movement of fuel within the fuel storage and settling tanks can agitate the fuel, lifting settled sediments and sludge and carrying it into the fuel supply lines of the main and auxiliary engines. The consequences can be main engine shutdown and loss of electrical supply leading to a blackout.

Load lines
Operators will need to ensure that their vessel is not too heavily laden for a Cape voyage. Relatively deeply laden vessels must stay close inshore around the Cape of Good Hope as the boundary with the Seasonal Winter Zone runs relatively close to the coastline. A Cape Horn transit is conducted entirely inside the Seasonal Winter Zone and vessels need to be loaded accordingly.

Bunkering and re-supplies
Alternative port calls are likely to be required for the provision of bunkers and stores. Where possible, these should be booked well in advance.

- Safe ports with good repair facilities and logistics are available but are geographically concentrated and frequently busy. Port Louis, South Africa and Walvis Bay are safe and have good infrastructure to assist.
- Vessels can provision and crew change in South Africa (Cape Town, Durban Port Elizabeth), but will need to take care as it can be rough with high swells, which can restrict such operations. These are often undertaken by launch, and in extreme cases by helicopter, which obviously adds to the cost.
- Yard space in South Africa is extremely limited and in the event that repairs are required, ships face a significant wait and associated cost.
- The increased voyage duration and exposure place an increased emphasis of the normal considerations of bunker planning and bunker quality.
- Due to high demand, delays whilst awaiting bunkers are becoming commonplace in certain ports

TMC SOLUTIONS

TMC Marine's consultants are available to help plan and mitigate the risks of global disruption to operations. Our experts include master mariners, naval architects, marine engineers, salvage, fire and cargo specialists. We draw on decades of maritime knowledge and technical expertise to tailor solutions for any situation.

Our master mariners, who have navigated the Southern Ocean in all seasons, are on hand to provide advice and support on all marine matters.

Our marine engineers with years of experience as chief engineers and technical managers ashore understand the risks of engine, machinery and fuel management on long ocean passages with heavy seas are available to both assist in planning and responding to technical issues.

TMC's naval architects have extensive experience of container stowage and sea fastening of standard and non-standard cargoes. The team are on hand to provide additional assurance prior to embarking on higher risk voyages.

Given the current uncertainties and likelihood of continued disruption , a prudent and planned approach to the mitigation of risks is highly recommended.

FOR MORE INFORMATION

please email info@tmcmarine.com
Telephone (24hrs): +44 (0)20 7237 2617

NEALE RODRIGUES
nr@tmcmarine.com

LIONEL FERNANDES
lf@tmcmarine.com