How 'Chaos' In The Shipping Industry Is Choking The Economy

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The Port of New York

The Port of New York: Freight Profile (2019)

- Annual income: $206 billion
  - National rank: Number 3
- Vessel Calls: 322 a week
- Tonnage (short ton): 2.63 million a week
  - National rank: Number 3
- Containers (TEU): 101 thousand a week
  - National rank: Number 3
- Vehicles: 11 thousand a week
  - National rank: Number 3
- Dry Bulk (short ton): 231 thousand a week
  - National rank: Number 21

MARITIME DISRUPTERS

• Weather events (Hurricane, etc.)
• Choke Points blockage
• Cyber/Terrorist Attacks
• Pandemic
RISK DETERMINATION

- Risk = Consequence x Probability
  - Consequence of severity can result in allisions, collisions, or groundings (highest ranking) while failures that are not likely to result in injury or catastrophic loss, carry the lowest ranking.

- Determine Consequence of Failure (COF)

- Determine Probability of Failure (POF)
  - Both require the study/research of maritime assets failure due to disrupters
MARITIME RISK

Determine Consequence of Failure (COF)

- Negligible to catastrophic impact
  - Loss of life, cargo, vessel
  - Compromised Supply Chains
  - Environmental Impacts

Determine Probability of Failure (POF)

- Remote to frequent possibility
  - Single Point of Failure
  - Redundant Point of Failure
  - Extreme Weather
MARITIME RISK

COF
- Weather – Supply Chains
- Cyber/Terrorist - Supply Chains
- Choke Points – Supply Chains
- Pandemic – Supply Chains

POF
- Weather – Increased weather events
- Cyber/Terrorist – Reliance on Technology
- Choke Points - Larger delivery modes
- Pandemic – Global movement
MITIGATING MEASURES

• **Extensive study/research** of maritime assets disruption
  – **Determine** Consequence of Failure (COF)
  – **Determine** Probability of Failure (POF)

• **Research response planning via:**
  – Single Point of Failure
    • Human, Electronic, Terminal Gear, connector points, electronic navigation, Government
  – Redundant Point of Failure
  – Planning preparedness

• **Develop/review response plans** (best practice) for **responders** (first responders, etc.)
  • Develop/review recovery protocol for all stakeholders
  • Prepare/review response assets in key locations regionally
  • Prepare/review recovery faculties, train individuals, etc.
Thank You!

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