



Quarterly Problem

- Science Edition -Free the grounded ship

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Maritime canals and straits play a critical role in international trade and they usually experience heavy shipping traffic. For instance, the Suez Canal, an artificial sea-level waterway in Egypt and considered the greatest engineering feats in the nineteenth century, recently experienced such an incident.

The morning of March 23rd 2021, a 400-meter-long and 220,000-ton container ship was aground on the banks of a single-lane section of the canal (about 300 meters wide) and blocked all traffic through the canal. After a successful marine salvage operation, on the morning of March 29th 2021 the ship was refloated. The Suez Canal Authority (SCA) demands \$900 million in compensation for the canal blockage from the ships' owner and insurance companies; nonetheless, they disagree with the SCA. The ship's grounding may take long litigation over what caused it to run aground in the canal, who is to blame and what other consequences occured.

Let's do a research to find out possible answers to the following questions:

- What would be pros and cons of constructing an artificial sea-level waterway like the Suez Canal?
- What caused the giant container ship's grounding at Suez?
- What could be done to refloat a giant container ship, which blocks a canal and disturbs international maritime trade?
- How did this blockage affect the global trade?
- Investigate recent news articles on this incident and explore what are the grounds for making such a significant claim by the CSA and others' counter claims and grounds?

Here are some air and marine traffic web sites. By analyzing these sites, what strikes you the most?

- Marine Traffic: marinetraffic.com
- Air Traffic: flightradar24.com

Whose method is the most accurate?

Focus on phrasing your approach in a clear and comprehensible way. Also state what foundation you have used for your estimations.

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Brainstorm-Box What would be possible reasons for a giant container ship to be grounded at the canal? Has it happened before?



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