­­Our Ocean Backyard

Gary Griggs

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Stuck in Suez

The Suez Canal, like the Panama Canal, is one of those man-made shortcuts that made global shipping much more efficient and less costly, saving days and dollars in transport costs. Going around the Cape of Good Hope at the tip of Africa adds about 5,500 extra miles and eight days to a ship’s route, although some ship captains made this decision two weeks ago rather than wait in line for an uncertain opening of the Suez Canal. Most of us probably don’t think much about it, but what if something like this happened?

After the *Ever Given* got stuck sideways in the canal for nearly a week, we now have a clearer idea of just how much commerce passes through the canal. On average, about 50 ships a day pass through the Suez Canal, or about 12% of the planet’s entire ocean commerce, including a reported 30% of containerships. The blockage was costing world trade about $400 million per hour, based on the estimated value of the cargo transiting the canal on a typical day of about $9.7 billion. It’s not clear yet, however, whether or how these delays will be reflected in things like the price of gasoline.

I sailed through the Suez Canal in 1984 on the *SS Universe* with 600 college students while teaching on the Semester-at-Sea program. It was like a giant traffic jam, but with very large ships lined up bow to stern instead of cars. There had been some military conflict in the region prior to our arrival and mines had been placed in the Red Sea. Our ship’s captain had been told, however, that the authorities felt reasonably certain that all of the mines had been removed, so it was safe.

On a map, the Red Sea, which separates Saudi Arabia from Egypt, Sudan and Eritrea, looks rather narrow, so I thought because it was a small enough body of water that they had probably found all the mines. For most of its length, however, it is 100-200 miles wide. You can’t usually see the land on either side as you traverse the Red Sea. This left me with a rather uneasy feeling. When the captain ordered all of the hatches between different sections of the lower decks, where most of the students bunked, sealed at night, just in case… I felt even a little more uncomfortable. I had my two and four year old daughters with me at the time. But we passed safely with no explosions or obstructions.

The Red Sea is a fascinating geologic feature and marks the location of a plate boundary where the African Plate is slowly pulling away from the much smaller Arabian Plate. Geologically, it is nearly identical to the Gulf of California where the Pacific Plate with Baja California is pulling away from the North American Plate and mainland Mexico.

The Red Sea has not only been a hot spot politically for decades, but also a hot spot geologically, literally. Hot thermal vents occur along the floor of the Red Sea and brightly colored red, orange, blue and green sediments were discovered years ago that are rich in heavy metals such as zinc, copper, nickel, vanadium, lead, manganese, and iron. This discovery was made by Jim Bischoff, a distinguished U.S. Geological Survey geochemist who retired to Aptos and sadly, passed away in February. While recovery of these valuable seafloor deposits was contemplated for a while, questions over ownership and issues of Middle East instability never allowed this to occur.

The Suez Canal links the Mediterranean Sea with the Red Sea and allows for direct shipping between Asia and Europe. While plate tectonics slowly opened up the Red Sea over millions of years, the separation wasn’t going fast enough for global shipping. So, in 1860, plans were developed to build the 120-mile-long canal, which was a 10-year construction project. While initially the canal only allowed for side-by-side passage of ships going in opposite directions at two locations, with expansion and widening in 2015, the capacity of the canal was doubled, from 49 to 97 ships per day.

The *Ever Given* was not the first vessel to be stuck in the canal. Following mechanical issues, a Japanese vessel became lodged on the canal bottom in 2017, but tugboats were able to refloat the ship within hours. A year earlier, the *CSCL Indian Ocean* spent five days grounded before being pulled loose by tugboats. At first, Suez Canal officials hoped to dislodge the *Ever Given* within a day or two. Instead, it was six days, giving it the dubious honor of blocking the canal longer than any other cargo ship in history, and at 1312 feet long, roughly the length of four football or soccer fields, the largest vessel ever stuck.

With the international nature of global shipping, when losses or damages occur, which is the case with the *Ever Given*, it is increasingly more difficult to assess who is at fault and would be liable for any assessed damages. In this instance, the ship is owned by a Japanese company, was being operated by a firm in Taiwan and is registered in Panama.

One of the world’s earliest very large oil spills occurred in 1967 when the *Torrey Canyon* hit rocks off the southwest coast of England in 1967 and spilled an estimated 700,000 barrels of oil, coating many miles of the shorelines of England and France. The oil was Saudi Arabian crude and the ship was carrying oil to England. It was registered in Liberia and had an Italian crew, but a German captain. To make matters even more complicated, the ship was owned by one American oil company but chartered by a second company. Such is the complicated nature of the global shipping industry today.

This column marks 13 years of bi-weekly Ocean Backyard columns… and there still always seems to be more to write about. Regular readers will note at the bottom of the column that there is a link to all 338 previous columns. If any of you have suggestions or requests for future columns, although chances are that I may have already written about your topic, please feel free to send me a message.