This month’s History Lesson is the second of two parts, the first of which was published in the September issue. In this installment, we examine Egypt’s recovery of control of the Suez Canal and efforts to modernize its infrastructure and operations.

In the middle of the 19th century, the French diplomat Ferdinand de Lesseps dreamed of linking East and West by connecting the Red Sea and Mediterranean Sea. It took him nearly 30 years, but he did finally see the carving of a 100 mi long canal through the middle of the desert, a feat that shaped the geopolitics of the world for the better part of two centuries.

In the many decades that followed the 1869 opening of the Suez Canal, two things remained consistent. One, the canal was a major component of the world’s transportation system and, as such, was in constant need of expansion. As early as 1887, the canal was modernized to allow navigation at night, and the facility was substantially expanded in the 1950s and in the 2010s.

The second constant — for almost 100 years — was Great Britain. As September’s History Lesson revealed, the British had opposed the Suez Canal from its inception, fearing that the French were attempting to challenge their maritime supremacy. But once the canal was completed, Britain became the primary beneficiary of the speedy trade routes the canal had opened. Within a decade, because of financial strife in Egypt, Britain had assumed an ownership stake in the canal.

British power only grew when, in 1882, a revolt broke out in Egypt, which was under Turkish rule at the time and led by a khedive, or viceroy. The British invaded, “under the guise of protecting the Khedive’s government,” wrote S.C. Burchell (The Suez Canal, New Word City, 2016). The French government protested the British action, and Lesseps “rushed to the scene in an effort to remove the British from the canal zone,” Burchell wrote. But by that time, Lesseps was older, “and his gesture was a futile one,” he wrote.

The British put down the revolt and occupied Egypt for the next 75 years, essentially securing the canal as their own. “Even after England’s official control of the Egyptian government ended in 1936, her troops still occupied a zone bordering, and including, the Suez Canal,” Burchell wrote.

According to author Zachary Karabell, the British stationed more than 100,000
troops in Egypt to protect the canal during World War I and sponsored an Arab revolt (led by T.E. Lawrence) to undermine Turkey (Parting the Desert: The Creation of the Suez Canal, New York: Vintage Books, 2003). After the war, the British "governed Iraq, Jordan, and Palestine, and increased their military presence in the canal zone," Karabell wrote.

Even when Egypt declared independence in 1922, the British maintained control of the canal. This was in an era when, Karabell wrote, "a substantial percentage of world trade was passing through the canal." By the 1930s, the United Kingdom granted the Egyptians more control over the canal.

During World War II, the Germans tried to oust the British from Egypt and capture the canal. "Without the canal, Britain would be cut off from India and Asia," Karabell wrote. The forces of Gen. Erwin Rommel's Afrika Korps moved toward Egypt through Libya, but the Germans' advance was halted in 1942 at the second Battle of El Alamein.

After World War II, rising Egyptian nationalism finally forced the United Kingdom's hand. In 1952 King Farouk, a descendant of the 19th-century ruler Muhammad Ali, was deposed by Egyptian army officers. The country's new leader, Col. Gamal Abdel Nasser, with significant assistance from the Soviet Union, became the "dominant figure in the Arab world for the next fifteen years, espousing his own particular mix of nationalism and socialism," wrote Karabell. Challenging the geopolitical orthodoxy of the day, Nasser "called for Arab unity, and refused to take sides in the emerging Cold War between the United States and the Soviet Union."

Nasser developed many projects, including the Aswan High Dam, completed in 1970. "When finished, it expanded greatly Egypt's profitable cotton crop, irrigated 2 million acres of desert, and provided hydroelectric power for industry. It . . . cost well over $1 billion," Burchell wrote.

But in the 1950s, when the dam was first proposed, Nasser tried to pit the Soviets and Americans against each other to help fund the project. When that effort failed, he nationalized the Suez Canal in July 1956, hoping its revenue would pay for the dam. For Egyptians this was a moment to seize the canal as their own, to fulfill the promise that Lesseps had made to Mohamed Sa'id Pasha, the young viceroy of Egypt in 1854, that the canal would bring Egypt into the future, on par with the other modern nations of the world.

Nasser's move sent the world into turmoil. By that October, Israel, the United Kingdom, and France all attacked Egypt, triggering the Suez Crisis. As Burchell wrote, the governments of these countries claimed they were protecting "the interests of international shipping." Soon after, the Egyptians had been defeated and the canal was under the control of the United Kingdom and France. But the takeover created a political crisis, and given the strategic importance of the canal, the Soviet Union and the United States quickly became involved. The United Nations ordered the United Kingdom and France to withdraw, returning control of the canal to Nasser.

A cease-fire was announced in early November 1956, but a new problem immediately emerged. As a consequence of the fighting, the canal was littered with wrecks. "There were sunken tugs, ferries, dredgers, cranes, a cement-laden landing ship tank, a broken railway bridge — altogether more than forty obstructions," wrote Raymond A. Wheeler, a retired lieutenant general in the U.S. Army ("Clearing the Suez Canal," The Military Engineer, Vol. 50, No. 333, January-February 1958). Moreover, "the canal lighting system was out of commission, workshops were damaged, and communications equipment was destroyed."

It took nearly 30 years, but French diplomat Ferdinand de Lesseps, above, finally achieved his dream of connecting the Red Sea and Mediterranean Sea via the 100 mi long Suez Canal. In 1956, Col. Gamal Abdel Nasser, Egypt's leader, nationalized the Suez Canal to use its fees to pay for the construction of the Aswan High Dam, below, triggering a battle known as the Suez Crisis.
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Officials estimated it would take a year to get the canal back to normal. In 1955, the canal had carried one-seventh of the world’s trade, Wheeler wrote, for a total of “108,000,000 tons of goods, more than twice as much as either the Panama Canal or the Kiel Canal. Some 14,000 ships passed through the Suez Canal that year, an average of forty every day. They sailed northbound with oil for the industrialized west, southbound with manufactured goods for Asia.”

The Egyptian government requested help from the United Nations, which quickly assembled an international fleet of 32 salvage and supply ships from seven countries around the world, manned by 450 officers and crew members. The fleet arrived in December. Among the most difficult tasks was the removal of the 300 ft freighter Zamalek, which blocked the canal’s southern entrance and had to be cut into pieces with acetylene and electric torches.

Ten ships were needed to remove the two spans of the El Ferdan Railway Bridge, a double-swing bridge from the east to the west banks of the channel. Perhaps the toughest job was clearing a 4,300-ton landing craft called the Akka, which had sunk carrying 1,800 tons of cement — and was now a solid concrete block.

“A pocket had to be dredged in the sand along one side of the ship to help in uprighting it,” wrote Wheeler. “Divers doing the preparatory work were subjected to strong currents in that part of the canal. Then the Akka was lashed between two big lifting craft by means of a web of thirty-four 9-inch cables passed under her hull. When the Akka had been straightened, the lifting craft were filled with water, so that they sank almost to the canal level; then the cables attached to the wreck were pulled taut, and the water was expelled. As the lightened lifting craft rose like pontoons, the Akka rose with them.”

The United Nations’ salvage fleet completed the removal of 42 obstructions by April 1957 at a cost of only $8 million, well below projections.

This wasn’t the first time a wreck had to be removed. In 1905, a steamship loaded with dynamite sank in the canal. The ship was blown apart after divers attached 300 lb of explosives to it — including to the hold containing the dynamite, according to a short news item in Scientific American (“The Suez Canal Explosion,” Vol. 93, No. 21, November 18, 1905). The story noted that cables were connected from the explosives to telephone wires along the canal’s shore, which led to a firing station 3 mi away. “After the circuits had been tested by sending a small current through electric resistance fuses, the mines were fired. An enormous column of water and debris immediately arose, and ascended continuously for five seconds, the estimated height of the column being over 1,500 feet.”

Perhaps the most unexpected and incredible outcome of the geopolitics of the canal occurred at the close of the 1967 Arab-Israeli War, which pitted Israel against Egypt, Syria, and Jordan. When the war ended, Egypt shut the canal down — trapping a fleet of cargo vessels within it. The ships — by varying accounts either 14 or 15 — came from the United States, the United Kingdom, France, Germany, Poland, Sweden, Bulgaria, and Czechoslovakia, according to a 2019 aljazeera.com article (“Suez: The Yellow Fleet trapped by the 1967 Arab-Israeli War”). A cease-fire between the Israelis, who occupied the land to the east of the canal, and the Egyptians, who occupied the land to the west, was reached within a week. But the diplomatic
fallout of the war took much longer to untangle, and the ships were stuck in the canal for a remarkable eight years.

The crews came together and established the Great Bitter Lake Association. Sailors, the article noted, “began to devise ingenious ways to make life on board less uncomfortable and established their own unofficial, mini-country, with its own traditions, sporting competitions, and even postage stamps.”

The sailors were not trapped — their shipping companies rotated skeleton crews on and off the ships — but in all, about 3,000 men and one woman were members of the association. The canal was finally reopened in 1975; by then, the ships had become so inundated with sand that they were nicknamed the Yellow Fleet. The engines on all but two of the ships had seized, and most ships had to be towed out of the canal.

When the canal was finished in 1869, Karabell wrote, it slashed the trip from Europe to India from “months to weeks, and the arduous route around the Cape of Good Hope was rendered obsolete.” But it has always required modernization to remain competitive. As writer Laure Cailloce noted on the news site of the French National Center for Scientific Research (cnrs.fr), “the Suez Canal is not the only option for shipowners, who make their decisions based on the fluctuating fares set by the Egyptian authority” (“The Turbulent History of the Suez Canal,” February 1, 2020).

In 2003, the Suez Canal earned international landmark status in ASCE’s Historic Civil Engineering Landmark Program. According to the canal’s website, the most recent renovation, in 2015, was meant to bolster the economy of both the canal zone and the world by reducing wait and transit times for ships and by increasing the number of “transiting vessels” from 49 to 97 ships per day by 2023. The $4 billion project deepened the existing western bypasses of the canal to 24 m and added a second, parallel waterway, 35 km long and 317 m wide. The work required crews to excavate 258 million cu m in the dry and dredge another 250 million cu m of soil.

The legacy of the Suez Canal is rich, as a symbol of Western and Egyptian ingenuity and as a symbol of globalization and local pride. A few months after the Europeans left, in 1956, on Christmas Eve, Egyptians “swarmed through Port Said, eager to destroy any last signs of foreign influence,” Burchell wrote. Armed with dynamite, the mob blew up a statue of Lesseps at the entrance to the canal. “Fragments of the eighty-foot statue fell smoking into the water.”

After the canal opened, Lesseps had become somewhat of an international celebrity. But boredom and hubris got the better of him. He attempted to build the Panama Canal, overconfident that he knew exactly how to pull it off. But the Panama Canal was a higher order-of-magnitude challenge than the Suez. Lesseps failed and was found guilty of attempting to bribe French officials to provide funding. He avoided a prison sentence only because he was still regarded by the French as the “Hero of Suez” and because of his age and poor health.

Still, Lesseps’ failure in Panama does not diminish his very real achievements in the deserts of Egypt. Lesseps was once challenged by a contemporary about whether he had the engineering acumen to pull off the Suez Canal. As Harvard economist Werner Baer wrote in “The Promoting and the Financing of the Suez Canal” (The Business History Review, Vol. 30, No. 4, December 1956), Lesseps’ real skill may have been that he was not an engineer. Lesseps “was not a specialist in any field, if one discounts diplomacy, of which he made little use. He was not an engineer, a financier, a politician, or a businessman. This lack of specialization surely helped him. It gave him perspective. He saw the proper place of each specialty as it fitted into his project, and he necessarily overlooked the intricacies of each field.”

He was, Baer concluded, “an innovator not so much in the realm of original ideas as in ways of attaining them.”

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