Strategic Spanish Colonial Forts in the "New World"

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Other research by the author:

The Perceived Needs of the US Customs Air Interdiction System Along the East Coast of the US (Texas to Maine including Puerto Rico) – Embry Riddle Aeronautical University, 2000

World War II, Combined Bomber Offensive, Europe, 1942 to 1945 – Air War College, 2002

Strategic Investigations Training Program – Federal Law Enforcement Training Center, 2005

The Beginnings of Aviation in Puerto Rico, 1911 to 1929 – Inter American University of Puerto Rico, 2011

Law Enforcement Aviation in the Caribbean, 1992 to 1997 – St. Augustine High School Aerospace Academy, 2019

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Some of the maps I created for this book relied on GOOGLE Earth as the background image. I found these images as the best available to to emphasize the different locations discussed in this book.

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INTRODUCTION

Shortly after Christopher Columbus arrived in the Americas, European explorers began to realize the immensity of the lands they had stumbled on. Discovered within these lands were massive amounts of silver and gold. The Spanish, English, French and Dutch monarchs realized these lands would greatly increase their power if they could bring these riches back to Europe. But to exploit the areas riches the monarchs needed to control the sailing routes between Europe and the New World, especially those in or near the Caribbean. Soon a struggle to control these routes and exploit the riches began between these major European powers.

When these struggles started monarchs did not have the financial resources to fund activities so far from their lands so they relied on privateers to do their fighting. Privateers were civilians that had a monarch's legal permission (Charter) to attack, raid and seize assets from a particular nation in a particular area.[1] Privateers would base their operation(s) from the safety of ports authorized in their particular charter. During this time frame one nation's privateer was another nation's pirate. When nations became rich enough to fund military actions in the area, the use of privateers was abandoned. The nations still fought each other for new world riches, but now with military officers leading the struggle.

Military officers heavily influenced the monarchs in deciding where particular stronghold would be located and which area should or should not be improved. After decades of struggle, a pattern of fortified locations emerged which is still apparent centuries later. Although hundreds of fortifications were built in the new world during the colonial era, only a few locations emerged as strategically significant.

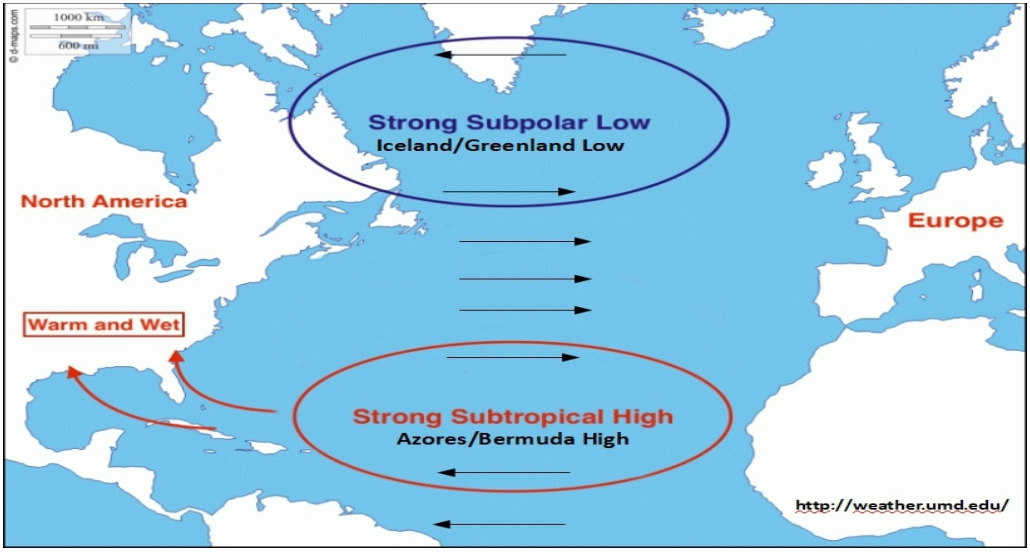
I will attempt to identify the most strategic Spanish colonial era fort locations, provide a short historical overview and in general terms explain the forts and areas strategic significance. I relied heavily on statements located within reference material available during the research period and is not intended to be an in depth study of a particular fortification, location, nation or even time frame. In this edition I have included important colonial era forts located along the Pacific Coast of the Americas. Hopefully it will provide basic information and inspiration for others to further research this topic.

The Winds and Currents

One of the main interests of European monarchs was to increase their power and wealth by bringing back vast amounts of treasures from the "New World" and Asia. But to transport goods by sea required using winds and ocean currents to move the ships. Sailors from all nations eventually discovered which prevailing winds provided the best sailing routes between Europe and the New World. These sailing routes determined the overall importance of a particular location. Therefore having a basic knowledge of how winds and water move on a global level is important in determining a fort's significance.

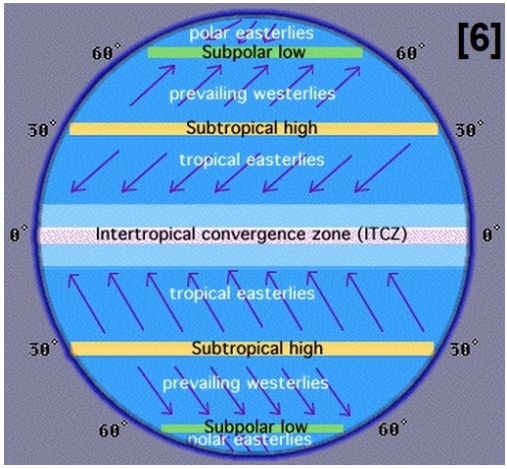
Meteorology has shown that wind direction is determined by low or high pressure systems. In the Northern Hemisphere winds around a low pressure system flow counter-clockwise with little to no wind in the center. Winds around a high pressure system flow clockwise with little to no wind in the center.[2] Low pressure areas are typically areas of bad weather while high pressure areas normally contain good weather. Between Europe and the New World, two large pressure systems dominate the weather pattern. Although there is a slight north and south movement of these areas during the year, known as the North Atlantic Oscillation, the general pattern does not change.[3]

The first area is a low-pressure system between Iceland and Southern Greenland known as the "Iceland Low" or "North Atlantic Low".[4] This low pressure area

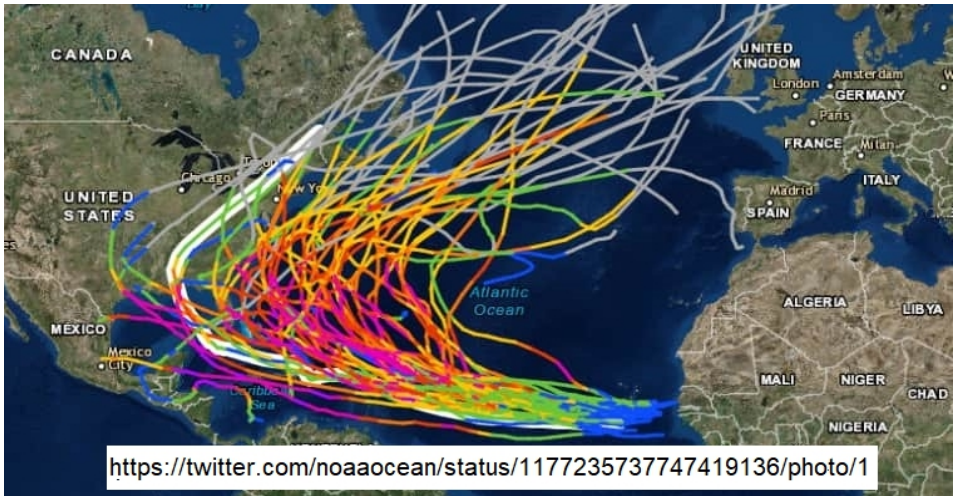


dominates wind circulation over the North Atlantic. Being an area of low pressure, winds move in a counter-clockwise direction. It provides a sailing route

from northern Europe to the north areas of the New World but the typically bad weather meant sailors generally avoided this area. Therefore it is very possible that Vikings could have used these winds and sailed to North America centuries before Christopher Columbus. It would have also made returning to Europe extremely difficult, even under the best of circumstances unless they traveled much further south. The second area is a high-pressure system centered over the middle Atlantic known as the “Azores High” or the “Bermuda High”.[5] Being a high pressure area, the winds move in a clockwise direction with typically good weather.

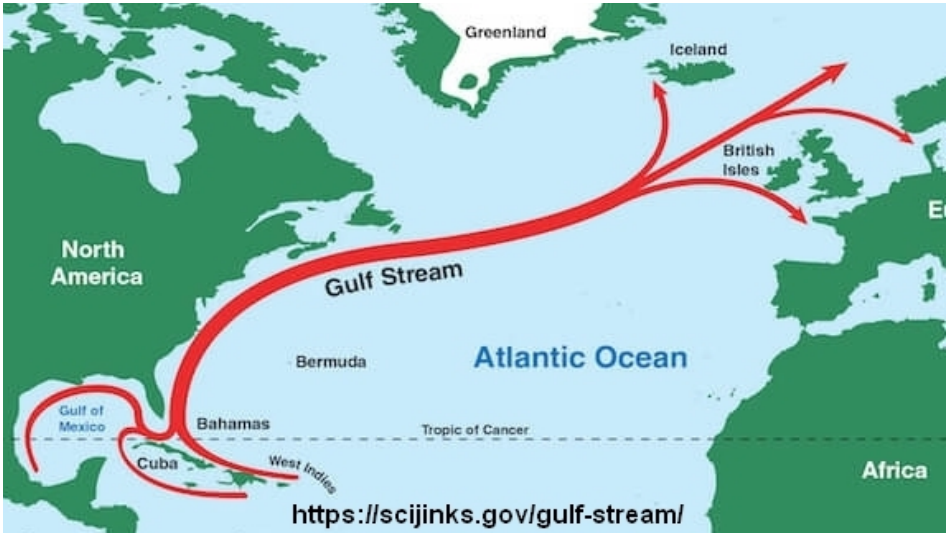


Between these areas, typically starting at the 30 degree North Latitude[6], the prevailing winds from West to East (*Westerlies*) prevented sailing ships from traveling directly from Europe to the New World for centuries. However much further south down the African coast past the Azores down to the Cape Verde Islands, the winds turn west (*Tropical Easterlies or Trade Winds*) towards the Caribbean. We see this wind pattern at work every year as hurricanes move off the West coast of Africa to the Caribbean, along the east coast of the US then on to the North Atlantic.

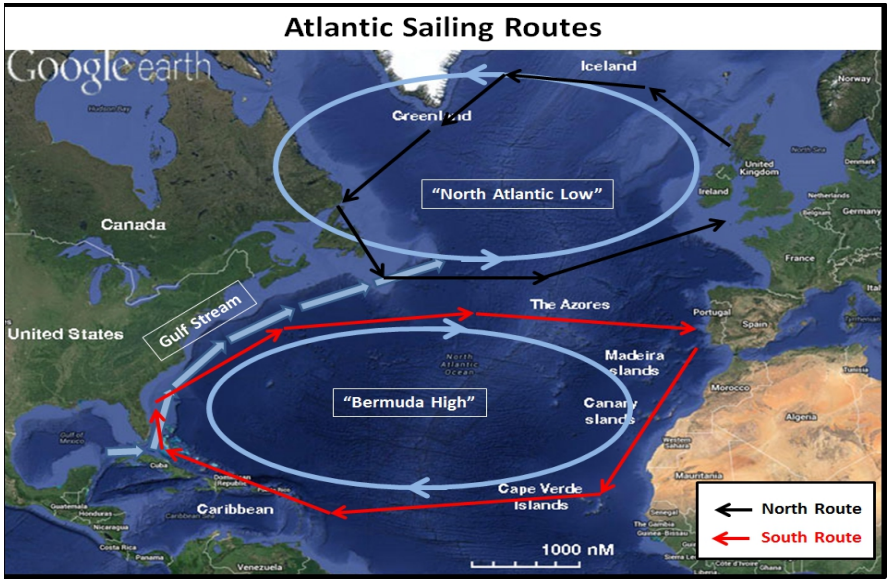


A similar pattern exists between the New World and Asia. However, the larger Pacific Ocean give storms more time to strengthen which makes Pacific Typhoons typically more powerful than Atlantic Hurricanes. When sailors discovered these wind patterns they became the main sailing route to and from the New World.

Once in the New World, sailors discovered a strong ocean current flowing north from the island of Cuba along the East coast of North America known as the Gulf Stream.[7] Sailors could use this strong current to carry their ships northward to a point where the winds would push them towards their destination in Europe. Using this combination of prevailing winds and the Gulf Stream, typical sailing



times between Spain and the New World during the 18th century took about 42days each way.[8] Faced with voyages of between 3 to 4 months, the Spanish fleet would typically make two trips per year to the New World and back.[9] Soon a nation's power and riches became directly tied to this southern route. Not much travel or trade would be accomplished via the northern route until later when England established colonies in North America.



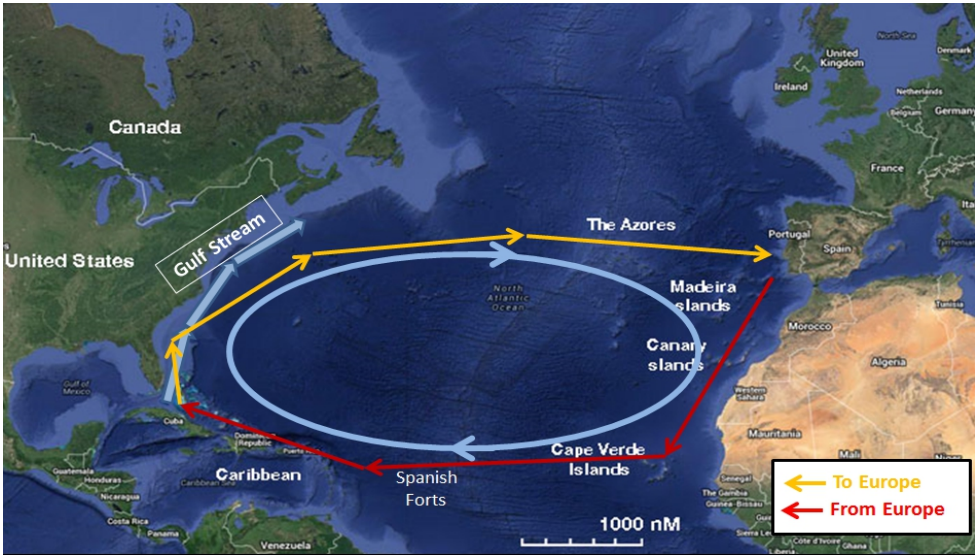
Spain controlled Florida, Texas, Mexico, Central America, the north coast of South America and the Caribbean islands so this general area became known as the "Spanish Main". However, this term is mostly associated with the Caribbean coastline from present day Colon Panama, through Cartagena Colombia, to the

Orinoco river delta in Venezuela.[10] For centuries competing nations, particularly Spain and England fought for control of the "Spanish Main" and the riches traveling through it.

The Voyage

The first lands a vessel encounters on a sailing voyage from Europe are the islands of the Eastern Caribbean. After a short rest on one of the islands, individual vessels would sail to destinations in South America, Central America or Mexico. There they would load with awaiting treasures then sail to Cuba for the return trip to Spain.

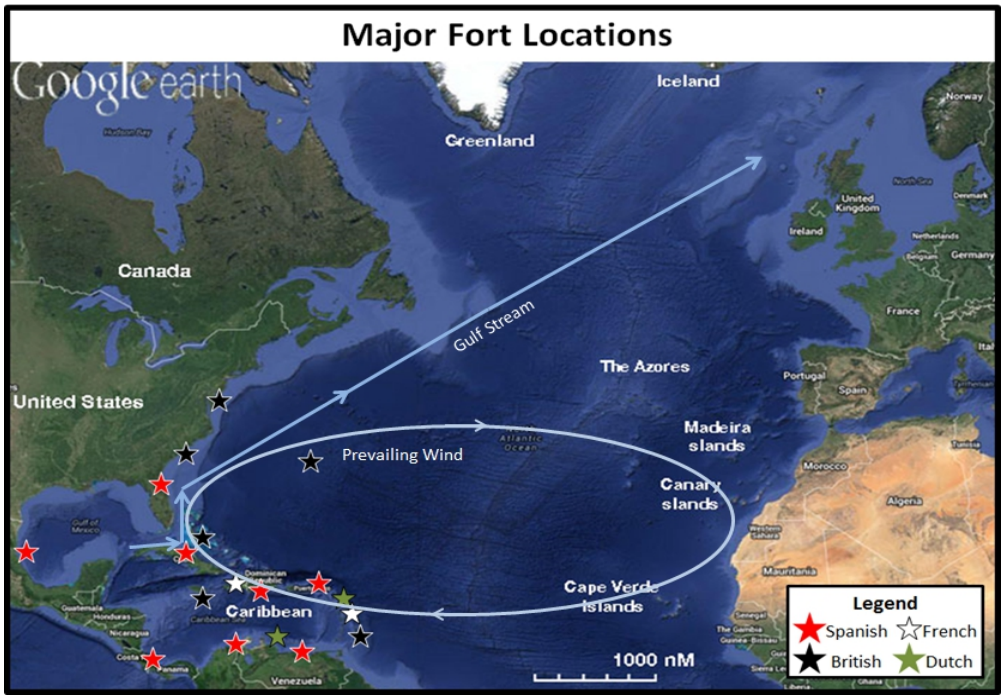
Faced with a dangerous return voyage, vessels loaded with silver and gold would wait in Cuba for Spanish warships to arrive before departing towards Spain. But just a few miles into the voyage, the Gulf Stream flows through the narrow area that separates Florida from Cuba and the Bahamas. Its southern arm opens westward into the Gulf of Mexico, while its northern arm opens into the Atlantic Ocean after passing the Bahamas.[11] This relatively narrow area, known as the Florida Straits, is where returning ships faced their biggest dangers.



Pirates, Privateers and enemy ships would patrol this relatively small area hoping to capture and loot a vessel that had strayed from the main group. To minimize this threat and force vessels to attack from only one direction, Captains would sail their ships close to the Florida coastline. But with no charts, ships could run aground making them easy prey. If that wasn't dangerous enough, storms and hurricanes could hit while they traveled in that relatively narrow area. Over the centuries many sailing vessels were shipwrecked in this area. Although the name is used for modern marketing purposes, the area is known as the "Treasure

Coast" due to the treasures still being found there.[12] After passing through the "Treasure Coast", ships would continue north on the Gulf Stream until they could catch prevailing winds towards Europe.

With this overall knowledge of how best to travel between Europe and the New World during the colonial era as well as some of the dangers, it quickly becomes apparent why forts were built at specific locations. In the next image you can see where strategically significant forts are located in relation to the winds, current and the most commonly used sailing route.



Except for the Castillo de San Marcos in Northern Florida, Spanish forts were located around the Caribbean Sea and the Gulf of Mexico. They were established as logistical centers to protect vessels traveling in the area. At the same time they provided the first line of defense for the Spanish territories against British forces.

British forts were concentrated north of Cuba where it would be easier to attack and plunder vessels on their return voyage to Europe, particularly between Florida and the Bahamas. At the same time the forts provided the first line of defense for the British territory to the North against the Spanish. Eastern British forts were used to stage attacks on vessels arriving from Europe before they entered more protected areas. Jamaica was used by the British as a staging point

to attack vessels within the Caribbean heading to and from Cuba.[13] These forts in the New World were crucial to the growth of Spanish wealth and power.

To bring treasures from Asia, the Spanish established the first worldwide system of transportation. This system of moving goods on a global scale is considered among the most successful naval operations in history and, from a commercial point of view, made possible key components of today's global economic system. King Philip II established this system based on the recommendations of Pedro Menéndez de Avilés, an experienced admiral and founder of St. Augustine.

World_Topography.jpg: NASA/JPL/NIMAderivative work: Uxbona (talk) - World_Topography.jpg, Public Domain

Treasures from all of Asia crossed the Pacific ocean from Manila in the Philippines to Acapulco, Mexico. From Acapulco most traveled by land to Veracruz for eventual transport to Spain via Havana Cuba. Some sailed on to Panama City, Panama then crossed by land to Portobelo for eventual transport to Spain also via Havana Cuba. This allowed Spanish ships to avoid unfriendly ports in Africa and India reducing the possibility of loosing treasure to Spain's enemies. This important Asian trade route ran from 1565 until 1815.[14] Menéndez also established ports on the South East coast of North America. These ports would have been used so treasure could travel to them from Acapulco over land. This would minimize moving treasure by ship between Florida and the Bahamas reducing losses to British and Pirate attacks. However this over land idea proved to be impractical due to the distances involved, natural obstacles and unfriendly natives so it was never established.

French and Dutch monarchs situated forts in a similar manner but were never able to finance enough forts to mount anything more than nuisance attacks.

The First Location – Santo Domingo, Dominican Republic

Fortaleza Ozama

The first Spanish colonial city in the New World was Santo Domingo, founded in 1496, and for decades the center of colonial Spanish power.[15] The Fortaleza Ozama was built between 1502 and 1508, led by then Santo Domingo governor Fray Nicolás de Ovando y Caceres and is the oldest European fort in the Americas. It was designed to guard the entrance to the port of Santo Domingo and defend the city from seaborne enemies. The main structure is a square-tower built of coral rock that looks more like an ancient Roman fortress than a colonial fort.

The fort backs up against the Ozama River and two cannons of the former battery still face the river approaches. The central tower of the building is almost 60 ft high, with walls over 6 ft thick. The fortified walls around the building are almost 10 ft thick, except on the river-side where the walls are 3 ft thick.[15] The

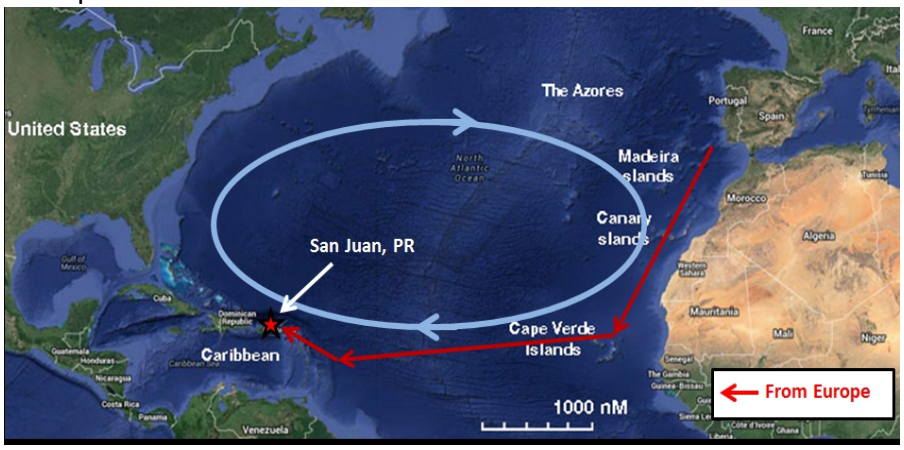
cement holding the stoned walls together is a mixture of gypsum, lime and the blood of animals. Spanish colonizers used enslaved Africans and Indigenous people to build the fortress out of local coral stone.

Fort Ozama was important during the 1500's as the center of Spanish power in the New World as well as the departure point for Conquistadors like Pizzaro, Cortez and others.[16][17] In addition to being a military fort, it was the center of Spanish administration in the New World and home to Santo Domingo's viceroys, the most famous being Christopher Columbus. But as Viceroy, Columbus was so corrupt and tyrannical the Spanish government removed him and he was jailed in Fort Ozama for a time.[18]

Within a few decades, as trade increased, the port of Santo Domingo could not provide the increased capacity or protection to vessels traveling to and from Spain. Since English and Dutch privateers eventually began operating from Eastern Caribbean islands, Jamaica and the Bahamas, Fort Ozama was too far away to effectively protect Spanish vessels. Therefore, the Spanish stopped investing into Santo Domingo and very little of importance happened there after 1586. Ironically, it remained the center of Spanish administration as the Real Audiencia de Santo Domingo. Over the centuries it was used as a military garrison and/or prison by Spain, England, France, Haiti, Gran Columbia, the US and eventually the Dominican Republic.[18]

The Closest to Europe – San Juan, Puerto Rico (USA)

The island of Puerto Rico is the first landmass with a plentiful supply of fresh water vessels arriving from Europe would encounter. It was the easternmost Spanish held territory and became the arrival point for vessels from Spain. San Juan was one of only two places the entire Spanish fleet would dock at any one time, making it a tempting target. From there vessels would disperse to other New World ports.



San Juan bay is an enclosed area with only one entrance/exit point making it easily defendable. Fortifications in San Juan include San Felipe del Morro, at the harbor entrance, San Juan de la Cruz, across the narrow harbor entrance, and San Cristobal located over land to the east.

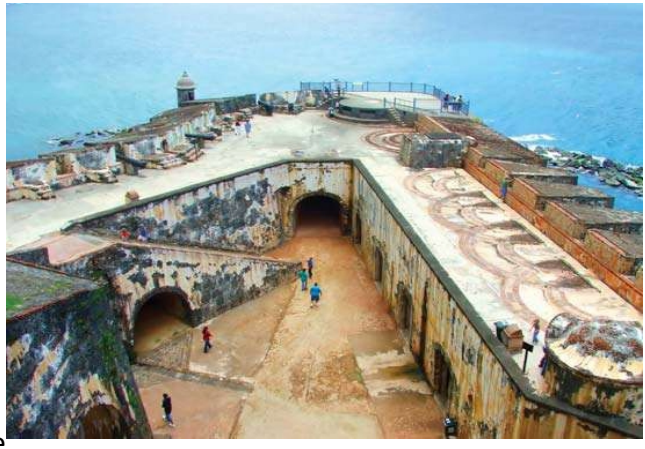
San Felipe del Morro

San Felipe Del Morro *(Construction Started 1539)* is a massive, multi-level fortress built on a strategic outcropping of rock that guards the entrance to San Juan Bay. The top level backs up against a plateau on which stands the city of San Juan. San Felipe del Morro (El Morro) resembles a true medieval European castle and looks as if it had been built during the crusades. A broad open lawn separates the fort from the city so that the city could not be used as cover for advancing enemies.

Upon the advice of Gonzalo Fernández de Oviedo y Valdés, an artillery battery was constructed on a rocky promontory called "El Morro". This battery consisted of a tower with 4 embrasures and a Water Battery at the foot of the slope for 3 additional guns. By 1555, San Felipe del Morro had an additional 8 bronze

cannons. At its peak, there were 450 cannons at San Felipe del Morro making it a powerful defensive citadel. An average of 400 to 450 troops were garrisoned in San Felipe del Morro during the time it was active but during the British attack of 1797 up to 6,000 soldiers were present.[19]

Crews of civilian craftsmen, off duty soldiers, prisoners, and slaves were used to build the fort. Although construction started in 1539, it continued for centuries. Most of the walls we see today were built much later, between 1760's and the 1780's. About 400 workers were busy during the peak of construction. The walls are 140 ft above the sea and vary between 18 to 25 ft thick.[20]



During the colonial Spanish era, San Felipe del Morro survived 5 major attacks. The first was in November 1595 led by Englishman Sir Francis Drake who unsuccessfully attacked with a fleet of 27 ships and 2,500 men.[21] The battle only lasted a few days with the British suffering 400 casualties, mostly when Drake tried to sail into San Juan Harbor, while the Spanish suffered only 40 casualties. This battle and defeat basically ended English hopes of establishing a significant presence in the Caribbean.[22]

The English attacked again in 1598 with a force of 20 ships and 1,700 men led by the 3rd Earl of Cumberland George Clifford. Clifford succeeded where Drake failed by attacking San Juan from land instead of attempting to sail into San Juan Harbor. The victory cost Cumberland nearly 60 casualties but the outbreak of dysentery that had crippled much of the Spanish had spread to the British. The outbreak incapacitated nearly 700 soldiers, forcing Clifford to retreat.[23]

The Dutch, led by Boudewiin Hendricksz, also attacked the island by land during the 1625 Battle of San Juan.[24] To the amazement of the citizens, the invaders were able to pass in front of the castle's defenders and into the harbor, out of reach of the fort's cannons. El Morro managed to resist the 39 day siege and eventually made the Dutch retreat. The attackers were still able to sack and burn the city before leaving. The Dutch suffered 400 casualties while the Spanish

suffered 17 casualties. This attack firmly demonstrated a weakness in the defenses of San Juan. Eventually, In 1765, King Carlos III give orders to make San Juan "A Defense of the First Order." Soon afterwards, construction on the main sections of fort San Cristobal began.[25]

In 1797 British General Ralph Abercromby and Admiral Henry Harvey attacked Puerto Rico with 68 vessels and a force of 7,000 men. After 13 days of fighting, Captain General Don Ramón de Castro and his forces successfully repelled the attack. The British suffered 107 casualties with another 124 soldiers captured. Almost 400 British soldiers surrendered during the battle. The Spanish suffered 75 casualties with another 56 soldiers captured while only 18 Spanish soldiers surrendered. Confirmation of actual troop strength is unattainable since only Spanish and Puerto Rican sources are available.[25][26] After that attack the British never mounted another major attack on Puerto Rico.

El Morro's last active fight occurred during a naval bombardment by the United States Navy during the 1898 Spanish–American War. This action ended the age of naval warfare in the Caribbean, at least in the classical sense. During the Spanish–American War, the castle was attacked at least three times by American naval forces with the largest being the Bombardment of San Juan on May 12, 1898. The war ended with the signing of the Treaty of Paris, in which Spain ceded the ownership of Puerto Rico, Cuba, Guam, and the Philippines to the U.S.[27]

San Cristóbal

Attacks by the English in 1598 and the Dutch in 1625 forced the Spaniards to expand the defense system of San Juan. They lengthened the city walls and built a small artillery platform (C*onstruction Started 1634*) named San Cristóbal on top of a hill to the east of El Morro. Named after Saint Christopher, the patron saint of land travelers, the Castillo San Cristóbal was built to protect San Juan from attack by land from the east. It is a three level fortification with most work on the fort occurring between 1765 and 1790. However, the series of outer defenses took over 150 years to complete.[25] Since the entire 27 acres of land that encompasses the city of Old San Juan lay within its walls, San Cristóbal is the largest single fort built by the Spanish in the New World.

Spanish army Colonel Tomás O'Daly (Irish by birth) was the Chief Engineer and followed the basic outline of a French Vauban-style fortification. The walls are over 150 ft straight up from the Atlantic shoreline and in some places up to 50 ft thick. It features triangular shaped bastions and a “Defense in Depth” strategy prevalent during the era. San Cristóbal contained a deep dry moat and a series of tunnels which provided protection to the soldiers from enemy fire allowing safe movement of troops, weapons and supplies. With this “Defense in Depth” strategy, soldiers could engage the enemy before they got to the city gate if attacked by land.

Gunpowder could also be placed in tunnels that ran under the attacking enemy lines which could be exploded if needed. These counter-mining tunnels would destroy parts of the battlefield and block the enemy from accessing the fort.[28] The main plaza of San Cristóbal is where troops drilled, were inspected and assembled for different events. Eleven casemates, large vaulted rooms designed with gun ports for cannons, border the plaza. Casemates also housed living areas, storage areas, the kitchen and latrine with the arch in the ceiling providing strength for the gun decks above. Thick-walled gunpowder magazines were built near the plaza and were designed to provide a good gunpowder storage area. Ramps provided access to the main firing battery and to the dry moat.

The fort was even designed to catch rainwater, storing it in 5 underground cisterns that could hold approximately 800,000 gallons. These cisterns are still used for park maintenance. It provides an excellent example of how self-sufficient practices of centuries ago are still in use.[28]

San Juan de la Cruz

Between the years 1608 and 1610, a small wooden fort named San Juan de la Cruz (often called “El Cañuelo” which is Spanish for “small channel”) was built on a small island on the opposite side of the bay from San Felipe del Morro. Its

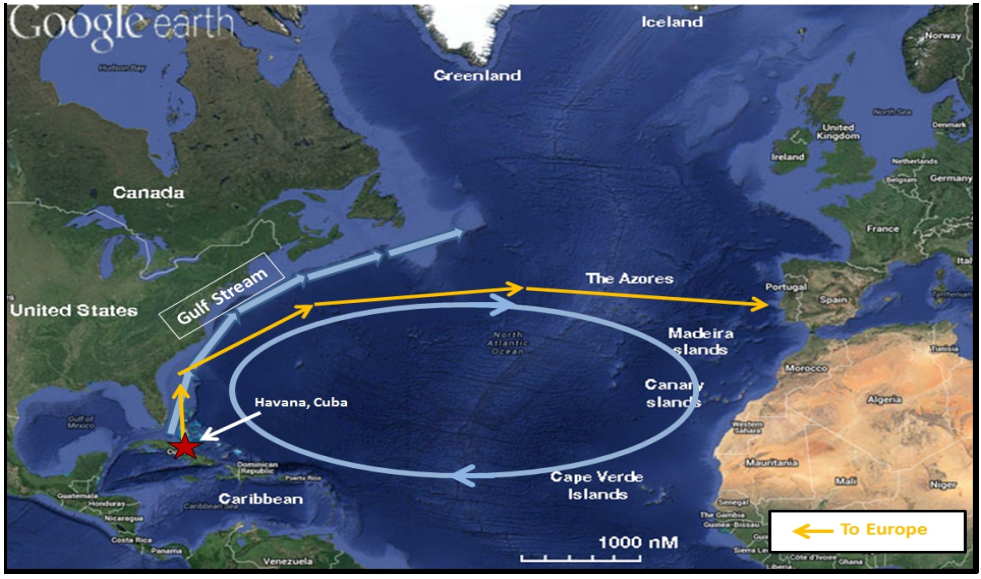
construction served two purposes. It protected the mouth of the Bayamón River, which was heavily used for transportation to the interior of the island and an ideal place to support the cannons of fort San Felipe del Moro. Enemy ships trying to enter the bay and avoid the guns of El Morro would be pushed by winds and tides into the shallow waters surrounding the small fort making them easy targets for San Juan de la Cruz. The fort was burned during the Dutch attack of

1625 and was rebuilt with masonry construction starting in 1630. It remained in use until the 24 and 32 pound cannon batteries of El Morro, which could reach well beyond fort San Juan de la Cruz, were finished in the early 1800's. From that point on the small fort became unnecessary.

Originally, fort San Juan de la Cruz was completely surrounded by water and only accessible by boat. The small 50-foot-square fort was provided with a sleeping area, a kitchen, a cistern but little else. Far from their comrades at El Morro and with little opportunity for recreation, it must have been very lonely duty for the handful of soldiers stationed there. More than likely being sent to fort San Juan de la Cruz would have been the result of some kind of disciplinary action.

In the early 1800's, infectious diseases like leprosy and cholera were affecting the population of San Juan. The isolated location of fort San Juan de la Cruz made it an ideal place to quarantine sick residents and new-arrivals. The fort was modified by adding sleeping quarters and a kitchen in order to accommodate patients. However, there is no documentary evidence that it was ever used for this purpose.[29]

The Center of Spanish Power – Havana, Cuba



The island of Cuba was the central and most strategic Spanish territory in the New World. In 1561, following a royal decree by Philip II of Spain, all ships returning to Spain from the New World were required to assemble in Havana and await protection by the Spanish Armada before departing back towards Spain.[30] That made Havana the only place the entire Spanish fleet would dock while loaded with treasures making it the most important location in the New World.

Havana bay is an enclosed area with only one small entrance/exit point making it easily defendable. The Forts in Havana include Los Tres Santos Reyes del Morro, at the harbor entrance, and La Cabaña located over land to the east.

Los Tres Santos Reyes del Morro

In 1558, King Phillip II of Spain ordered the construction of El Morro, an imposing fort that has become a long-lasting symbol of Havana. The fortress was built by Italian engineer Juan Bautista Antonelli to repel raiders from the Cuban capital and completed in 1590. Slave laborers were used to dig rocks from the moat and build the thick castle walls, although it took 30 years to complete due to economic problems and political wrangling.

El Morro, as it is known, is an irregular polygon-shaped bastion rising more than 120 ft above the sea with thick walls and defensive extensions.[31] El Morro, which is perched on a rock cliff at the entrance to Havana Bay, served to protect the harbor from pirate attacks from 1590 to 1762.[32] Then, during the 7 year war, it was heavily damaged during the 1762 Battle of Havana and Cuba was captured by the British. Cuba remained a British possession until the Paris Peace Treaty of 1763 when England handed Cuba to Spain in exchange for Florida.[33] El Morro is currently a symbol of modern Cuban pride.

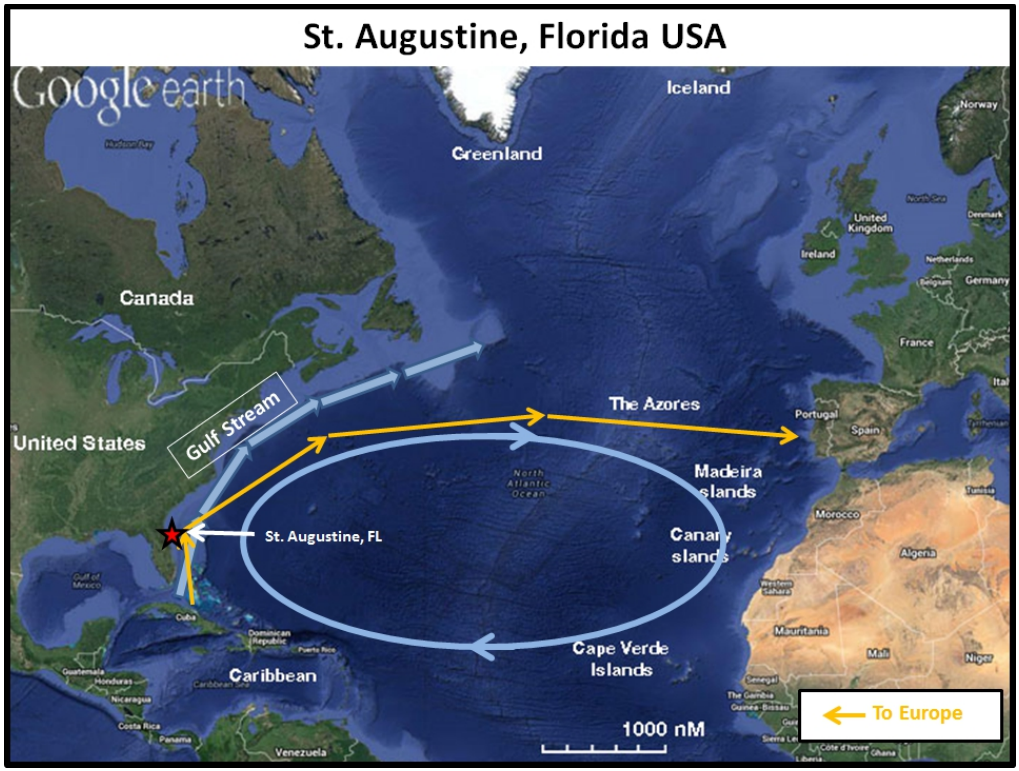
San Carlos de la Cabaña

A key factor in the British capture of Havana was the vulnerability of El Morro fortress by land attack. Realization of Havana's land weakness, and the fear of future attacks on Havana, prompted the Spanish to build a new fortress improving the land defense of Havana. In 1763, as recommended by Irishman Alejandro O'Reilly, King Carlos III of Spain ordered the construction of San Carlos de la Cabaña to reinforce Havana and the less extensive 16th-century El Morro fortress. The plans were drawn up by a Frenchman named De Valliére while his compatriot, Ricaud de Tirgole, was responsible for the design. Built on high bluffs overlooking the harbor entrance, this titanic white fortress is like a traditional gunpowder-era fort on steroids. The fortress includes a 1,300 ft long plaza, within a polygon surrounded by walls measuring a total of about 1,400 ft with bastions, terraces, firing slits and an outer curtain wall. By 1859, 1,300 soldiers were garrisoned there equipped with 120 cannons.

By the time it was completed in 1774, La Cabaña was the second-largest colonial military installation in the New World. It cost so much to build, approximately 14 million gold pesos, it is said that King Carlos III requested a spyglass to see it claiming that such an expensive project could surely be seen from Madrid.[34] La Cabaña was also among the very last of the colonial-era forts constructed in the Caribbean. After completion, La Cabaña enjoyed a quiet existence since Havana was never again attacked.

The Northern Most – St. Augustine, Florida (USA)

Castillo de San Marcos



The Castillo de San Marcos is located on the western shore of Matanzas Bay in the city of St. Augustine, Florida. Being at 29.9° North latitude, it is located where the prevailing winds begin to shift to the East and was the last fortified Spanish possession ships could stop before crossing the Atlantic towards Spain. Due to this strategic location it became the front line between the Spanish and English empires in the New World. It is unique in North America, the only extant 17th century military construction and the oldest masonry fort in North America. It is a prime example of the "bastion system" of fortification, the culmination of hundreds of years of military defense engineering.[35]

San Marcos was designed by the Spanish engineer Ignacio Daza, with construction beginning in 1672. The fort's construction was ordered by Governor Francisco de la Guerra y de la Vega after a raid by the English privateer Robert Searles in 1668 that destroyed much of St. Augustine and damaged the existing

wooden fort. Work proceeded under the administration of Guerra's successor, Manuel de Cendoya in 1671. The first blocks of the locally available semi-rare form of limestone, called “coquina”, were laid in 1672. Given its nature, coquina would seem to be a poor choice of building material for a fort but it was the only locally available material that would not burn or rot. Due to how it is formed, coquina contains millions of microscopic air pockets making it compressible. This property turned out to have an unexpected benefit.

When a cannon ball hits solid material, such as granite or brick, the material shatters violently. But cannon balls hitting the Castillo walls simply sunk into the coquina instead of shattering, much like firing a “BB” in to Styrofoam. The Castillo is one of only two fortifications in the world built out of coquina. The other one is Fort Matanzas located 14 miles south on the Matanza River protecting the southern entrance to St. Augustine.[36]

The particular star shape design of the Castillo is a result of architecture adapting to technology. The change in warfare brought about by artillery created new types of defensive structures adapted, both to withstand or avoid the impact of cannon projectiles and to effectively mount cannons to repel any attackers. Of the major architectural variations the "bastion system," named for the projecting diamond or angle shaped formations added onto the fort walls, was the most commonly and effectively used. The construction of the core of the current fortress was completed in 1695, though it would undergo many alterations and renovations over the centuries.[37]

The Castillo de San Marcos was attacked several times and twice besieged. The first time was by English Carolina colonial Governor James Moore in 1702 and his forces. About 1,500 town residents and soldiers crammed into the fort during the two-month siege. The small English cannons had little effect on the walls of the fort because the *coquina* was effective at absorbing the impact of the shells. The siege was broken when the Spanish fleet from Havana arrived, trapping some English vessels . The English were defeated, decided to burn their ships preventing them from falling under Spanish control and marched overland back to Carolina. The town of St. Augustine was destroyed, in part by the Spanish and in part by the English, as a result of the siege. After recovering from the 1702 siege, St. Augustine's defenses were strengthened starting in 1738 but economic issues left the city wanting for supplies.[38]

In June 1740, British Governor of Georgia James Oglethorpe led an English fleet of seven ships and attacked St. Augustine. As in the 1702 siege, three hundred soldiers and 1,300 town residents found refuge within the Castillo's walls. For 27 days the British bombarded the Castillo and St. Augustine. Realizing his cannons could not penetrate the Castillo's walls, Oglethorpe decided to starve the people of St. Augustine by blockading the inlet at the Matanzas River and all roads into St. Augustine. With morale and supplies running low among British troops, the possible arrival of Spanish reinforcements from Cuba and the start of Hurricane season, Oglethorpe decided to retreat after a total of 38 days.[39]

San Marcos was never taken by force; however, the fort changed hands five times by peaceful negotiations among four different governments. With the Paris Peace Treaty of 1763, after the 7 year war, Britain gained control of Florida in exchange for Havana, Cuba. St. Augustine became the capital of British East Florida and the fort was renamed Fort St. Mark.[40] Different from the Spanish, the British used the fort as a base of operations and as a military prison especially during the American Revolutionary War. Several revolutionary fighters were imprisoned there. Among those was Christopher Gadsden, at the time the Lieutenant governor of South Carolina. He was also a delegate to the Continental Congress and a Brigadier General in the Continental Army.[40]

Improvements were begun on the fort, in keeping with its new British role. The gates and walls were repaired, and second floors were added to several rooms increasing the forts housing capacity. Although Florida was targeted by several aborted expeditions by colonists from Georgia, none ever succeeded. At the end of the American Revolution, the 1783 Treaty of Paris called for the return of

Florida to Spain. So on July 12, 1784, Spanish troops returned to St. Augustine and the fort's original name was restored.[40]

By the early 1800's steam ships began replacing sailing vessels for transportation of goods and when on June 20, 1819 the steamship SS Savannah crossed the Atlantic in 29 days[41] locations based on prevailing winds lost overall strategic importance. In 1821 with the loss of strategic importance, a massive Spanish debt, Spanish colonies gaining independence and tensions with the United States over slavery, Spain ceded Florida to the United States under the Adams–Onís Treaty. This ended 287 years of Spanish rule over Florida. The fort became a United States Army fort and renamed Fort Marion, in honor of American Revolutionary War hero Francis Marion.[42][43]

In January 1861, Florida seceded from the United States during the opening months of the American Civil War and Confederate troops marched on the fort. But Union troops had already withdrawn from the fort, leaving only one man behind as caretaker. The Union soldier manning the fort refused to surrender it unless he was given a receipt for it from the Confederacy. He was given the receipt and the fort was handed over without a shot. Most of the artillery in the fort was sent to other locations, leaving only five cannons in the water battery.[44] The fort, along with the city of St Augustine, was re-taken by Union forces on March 11, 1862 when the 48 cannon Union frigate USS Wabash entered the bay. [45] Confederate forces had left the city the previous evening in anticipation of the arrival of the Union fleet. The fort and St. Augustine returned to Union control after acting Mayor Cristobal Bravo officially surrendered the city to Union Navy Commander C.R.P Rodgers. City leaders were willing to surrender in order to preserve the town so the city and fort were again taken without firing a shot.

Under United States control the fort was used as a military prison to incarcerate members of Native American tribes, including the famous Seminole warrior Osceola during the Second Seminole War.[46] Other members of western tribes, including Geronimo's band of Chiricahua Apache, including his then wife Ih-Tedda were held at the fort. Geronimo's daughter was born in the fort and named Marion by the US Soldiers in honor of the fort. As an adult, and not wanting to be associated with the repression represented by the fort, she changed her name to Lenna. The Native American art form known as "Ledger Art" had its origins at the fort during the imprisonment of members of the Plains tribes, such as Howling Wolf of the southern Cheyenne.[47]

The fort was declared a National Monument on October 15, 1924 by President Calvin Coolidge. After 251 years of continuous military possession the fort was deactivated in 1933 and turned over to the United States National Park Service that same year. In 1942 the original name, Castillo de San Marcos, was restored by an Act of Congress.[48]

Santa Teresa de Mosé

In 1693, King Charles II of Spain ordered his Florida colonists to give runaway slaves from British colonies freedom and protection if they converted to Catholicism and agreed to serve Spain. This policy of refuge gave the Spanish a weapon to use against the British. Spain's policy toward runaways slaves took laborers from the British colony and boosted its own colonial population to oppose the British. Between the late 17th and the mid-18th centuries many slaves from the British colonies successfully escaped to Florida. Spanish records note at least six separate groups of slaves who arrived in St. Augustine between 1688 and 1725 from as far as New York.

In 1726, Florida governor Antonio de Benavídes created a black militia in St. Augustine to help white Spanish troops defend against British attacks. He appointed Francisco Menéndez, a black slave and a veteran of the Yamasee War, to lead the militia giving him the rank of Captain. In 1733, the Spanish government outlawed the sale of runaway slaves and offered the black soldiers freedom after four additional years of service. Menéndez and several others received their freedom from then Florida governor, Manuel de Montiano in 1737. In 1738 Governor Montiano granted the black citizens of St. Augustine a plot of land two miles north of St. Augustine where they could build their own settlement and fort. The fort was officially named "Gracia Real de Santa Teresa de Mosé" but the locals and the inhabitants know it as Fort Mosé.

The original fort was small, containing a watchtower, a well and a guardhouse. The fort had earthen walls, a shallow moat and the layout was similar to other Spanish Florida forts at the time. The community had thirty-eight men with their families numbering about one hundred people. Captain Menéndez was appointed leader of Fort Mosé and the community. Although a white Catholic priest and a white Spanish officer were at the village, governor Montiano considered Menéndez the head of Fort Mosé and respected his leadership.[50]

The Spanish government emphasized its religious and humanitarian reasons for founding Fort Mosé, but the village was strategically placed to help defend St. Augustine. Trails and waterways to St. Augustine from the North and West

passed near Fort Mosé making it strategically important to the Spanish military. Besides, who better to defend St. Augustine than runaway slaves that did not want to return to British slave plantations. So in exchange for the land, the black militia became the first line of defense and protected the northern land approaches to St. Augustine.

In 1740, during his attack against St. Augustine, British General James Oglethorpe captured Fort Mosé while the inhabitants fled to St. Augustine. A few weeks later, Captain Menéndez led his forces in a surprise attack and a valiant re-taking of the fort in what became known as the Battle of Bloody Mosé. The fort was destroyed during the battle and the black community became part of daily Spanish colonial life in St. Augustine.

In 1752 Governor Fulgéncio García de Solís ordered the black St. Augustine citizens to rebuild Fort Mosé at a new site, again under Captain Menéndez' leadership. This fort was a much larger walled enclosure about 200 ft per side, surrounded by a moat on three sides, a river on the fourth and contained a number of buildings. Archaeological evidence indicates that some of the

community buildings may have been oval in shape and about 12 feet in diameter. They may have been similar to African houses already familiar to the Mosé residents and similar to indigenous housing within the local area.

The second Fort Mosé lasted until 1763 when Spain ceded Florida to Britain as part of the 1763 Paris Peace Treaty which ended the 7 year war. The Spanish, including the entire Fort Mosé community, left Florida and settled in Matánzas, Cuba. Although evidence exists of Spanish activity at Fort Mosé when Spain returned to Florida in 1783 after the American Revolution, the black Spanish community never returned to Fort Mosé.

Fort Mosé is the first free black community in North America and the only known free black community in the present-day southern United States that a European colonial government recognized and sponsored.[51]

Torre de Matanzas

The British siege of 1740 convinced Governor Manuel de Montiano that he needed more than just a wooden tower at the Matanzas river inlet South of St. Augustine. Had the British been able to seize that point, they could have starved the city into surrender. Montiano therefore, put his career on the line. He did not even ask the king's permission before he ordered engineer Pedro Ruiz de Olano to build a strong, stone tower near the Matanzas river inlet about 15 miles south of the town. The structure was named by the Spanish as "Torre de Matanzas" (Matanzas Tower) but is known as Fort Matanzas.

Fort Matanzas is 50 feet on each side with a 30-foot tower and was also built of coquina. Lime for the mortar was made by burning oyster shells. A foundation of close-set pine pilings driven deep into the marshy ground stabilized the fort.

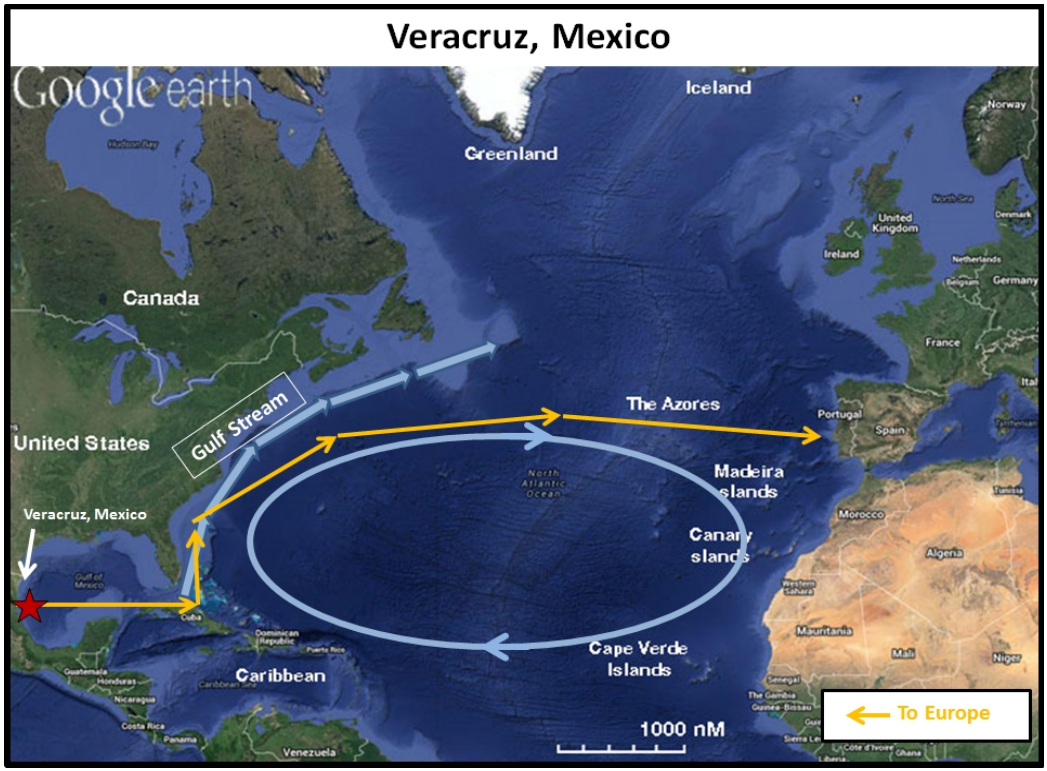
The forts primary mission was to protect the Southern route to St. Augustine by maintaining control of the nearby Matanzas river Inlet, which is less than a half-mile away. The fort could cover the inlet with its five guns, four six-pounders and one 18-pounder. Loopholes in the south wall of the tower also allowed the infantrymen to fire their muskets from inside the fort. Soldiers were rotated from St. Augustine for one-month duty tours at Matanzas, usually a cabo (officer-in-

charge), four infantrymen, and two gunners. More could be assigned to this remote outpost when tensions increased, up to the planned maximum of 50 during a crisis. The soldiers lived and ate together in a sparsely-furnished room off the gun deck while the officer lived in a vaulted room above.

Besides warning St. Augustine of enemy vessels and driving them off, if needed, the fort served as a rest stop and a place where vessels heading for St. Augustine could get advice on navigating the river. After thwarting British attempts to gain the inlet in 1742, the fort never again fired its guns in battle. [49]

The Gulf of Mexico

San Juan de Ulúa – Veracruz, Mexico



San Juan de Ulúa is a fortress on La Gallega Island facing the Mexican port of Veracruz. Before arrival of the Spaniards the island was a sanctuary dedicated to the Aztec God Tezcatlipoca. According to legend the name comes from the Nahuatl language Gulhua and Ulli. The San Juan part of the name was allegedly added by Spanish Conquistador Juan de Grijalva due to having arrived to the island in 1518 on the day of San Juan Bautista. Hernan Cortés also landed there in 1519 to start his exploration of the New World. San Juan de Ulúa was the main location, within the Gulf of Mexico, that Spanish vessels docked to pick up silver and gold for eventual shipment to Spain.[52]

Initial construction on the island began in 1535, under the guidance of Antonio de Mendoza with fort construction starting in 1565. Later, Juan Bautista Antonelli began its actual fortification which was completed by Jaime Franck in 1692. To build the fort, a mortar made out of oyster shells, turtle eggs, sand and salt water

was made. This made the walls resistant to the strong north winds that are frequent in the area. The internal arches reflect different architectural styles, from the midpoint to the elliptical vaults which enhance the structure. The most representative feature of the fort is the "Muro de Argollas" (Wall of Rings) where there were around 35 rings to tie boats to the fort. This way they were able to protect the ships from the strong north winds that whipped through the port, preventing them from crashing into each other during bad weather.

Over the centuries, several battles and skirmishes were fought within the port of Veracruz involving Fort San Juan de Ulúa. In 1568 the Spanish Navy trapped the English fleet of Sir John Hawkins, including his cousin the young Francis Drake, at San Juan de Ulúa. Richard Hakluyt's book, The Principal Navigations, Voiages, Traffiques and Discoveries of the English Nation (1598–1600), claims Drake and Hawkins were on a private venture, peacefully trading with the local Spanish colonists in violation of Spanish law, when the Spanish naval fleet arrived. It has been speculated that Drake and Hawkins likely had raided Spanish settlements elsewhere during that voyage. Historians have speculated that the Spanish colonists were forced to trade with them under threat of raids and attacks.

Despite being suspicion of each other, the Spanish allowed Drake and Hawkins to take shelter from a bad storm, under truce, on an otherwise open coastline near San Juan de Ulúa. The Spaniards attacked the British, taking them completely by surprise. Hawkins and Drake escaped in the ships Minion and Judith, but their larger ships were taken or destroyed while many of the English sailors were killed. The attack and subsequent hardships were instrumental in fueling Drake's great hatred of Spain and Catholicism.[53]

In 1683 Fort San Juan de Ulúa was taken by Lorenzo Jácome (Lorencillo) who also captured and sacked Veracruz. It was the last stronghold of the Spanish crown on

the continent and resisted sieges from 1821 until 1825. The fort was occupied by French troops in 1838 and American forces in 1847.

The most famous use of the fort occurred in 1767. On April 2, 1767 and by order of Spanish King Charles III all members of the “Society of Jesus” (Jesuits) were expelled from Spanish lands and all their goods were confiscated. Local officials were ordered to surround the Jesuit colleges and residences, arrest the Jesuits, and arrange their passage to ships awaiting them at various ports. King Carlos' closing sentence read: "If a single Jesuit, even though sick or dying, is still to be found in the area under your command after the embarcation, prepare yourself to face summary execution.” During June 1767, Spanish soldiers removed the Jesuits from their 16 missions and 32 stations in Mexico. Many died on the trek along the cactus-studded trail to Veracruz. There they were imprisoned at Fort San Juan de Ulúa until ships transported them to their Italian exile.[54]

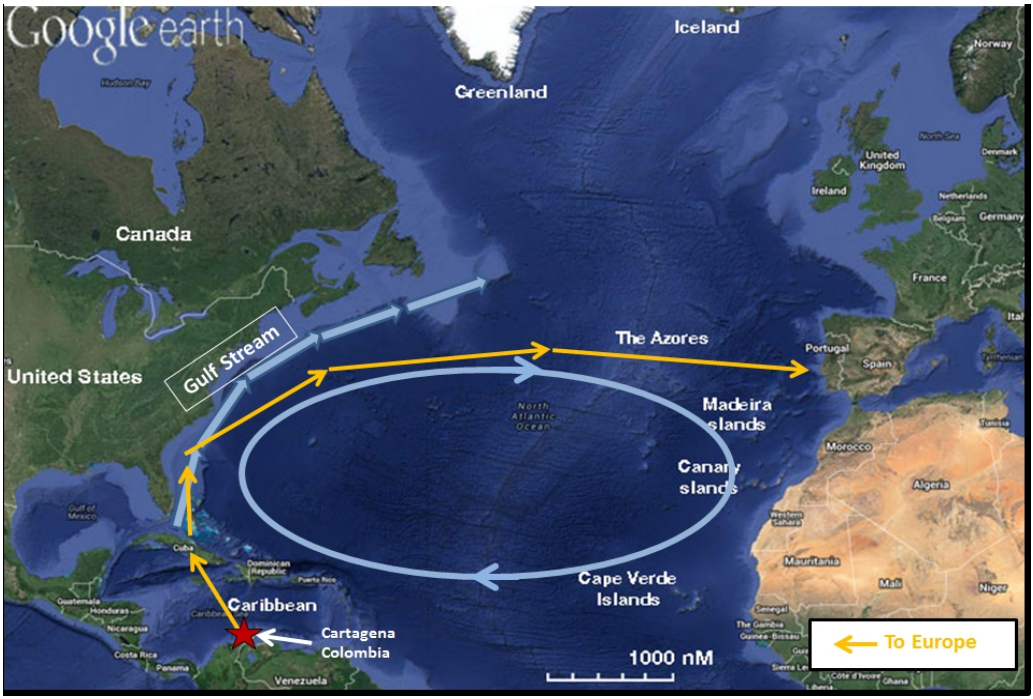
The fort once held the image of the La Virgen de La Escalera (Virgin of the Staircase) whose little chapel entrance was under the stone staircase leading to the San Crispín bastion, near the chancery, ammunition room, and treasury room. Whenever ships arrived into the bay, this image was raised to the top tower to greet the passengers from the boats, and from whence cannons would be fired in her honor. The Virgen de La Escalera was known to these travelers and to the surrounding villages in Veracruz. The original image has been missing for hundreds of years, its memory lost ever since Mexico gained independence and entrance into the walled citadel was restricted.

When the modern port of Veracruz was completed in 1902, the island which the fortress stands became connected to the mainland by a breakwater. During 1915 the fortress became the presidential residence of Benito Juárez during the war of the Reform and of Carranza in the Revolution.[55]

The Caribbean

San Felipe de Barajas – Cartagena, Colombia

The Castillo San Felipe de Barajas (originally known as Castillo de San Lázaro) is a Spanish Colonial era fortress in the city of Cartagena, Colombia. The fort is located on San Lázaro Hill in a strategic location dominating approaches to the city by land or sea. Initial construction began in 1536 in what many historians believe was the single most lucrative, and looted, port city in the New World.



Cartagena was the capital of trade and a city which was easy enough to breach, both by land and sea. The original fortress was quite small but was significantly expanded in 1657. It was given repairs and improvements by José de Herrera y Sotomayor in 1739. San Felipe was often in need of repairs due to the unfortunate habit Cartagena had for attracting pirate raids. The last major expansion occurred in 1763 by Antonio de Arévalo. Its final name, San Felipe, was given in honor of Philip IV of Spain.[56]

The genius of San Felipe lies very much in its design. This giant complex is actually a collection of 8 smaller, individual forts. You can take one, maybe two… or even three but the rest will remain secure. The overall fortification consists of

a series of walls, wide at the base and narrow toward the parapet, forming a formidable pattern of bunkers with eight artillery batteries and a garrison of 200 soldiers. The batteries and parapets protect one another, so making it practically impossible to take a battery without taking the whole defense system. Key features include the triangular Castillo de San Felipe de Barajas, surrounded by the batteries Santa Barbara, San Carlos y Los Apostles, Del Hornabeque, de la Cruz, de la Redención and San Lázaro. The combined 68 guns all faced away from the city. The main underground gallery runs along the perimeter of the complex at sea level. Chambers within it could be exploded preventing the advance of overhead attackers. The castle is striking for its grand entrance and its complex maze of tunnels. It towers 135 ft above sea level and is a formidable example of Colonial Spanish Military architecture.

To conquer Castillo San Felipe, you'd have to conquer every single fort, one after the other, while keeping all others under control which turned out to be an impossible feat. It was truly impregnable and after final completion was never

taken despite numerous attempts. A complex system of tunnels connected strategic points allowing provisions to be distributed and facilitated evacuation. The tunnels were constructed so that any noise reverberated all the way along them, making it possible to hear the slightest sound of an approaching enemy's feet, and also making internal communication easy.

San Felipe Castle's main aim was to defend the Spanish Caribbean trade of Cartagena; those immense loads of gold, silver, cacao, tobacco, chili and African

slaves, which the Spaniards transported to Latin America, for over 200 years. This was invaluable and highly coveted cargo especially during a period in history where possession belonged primarily to the one with the strongest weapons. Additionally, piracy was strife in the region. Looting occurred from the farms and mines to the ports and even the seas, although the group sailing strategy – whereby more than 3 dozen ships would sail the Atlantic together – ensured no huge collective losses could ever be suffered.

The castle first fell to an assault in 1697 by the French privateer Sir Bernard Desjean, Barón de Pointis and Jean Baptiste Ducasse during the War of the Grand Alliance, a nine-year conflict fought between Louis XIV of France and a European coalition which included the Spanish Empire. The castle was repaired by José de Herrera y Sotomayor in 1739 which included strengthening the defensive capabilities of the fortress by adding extra fortifications and gun turrets. These additions would prove useful during the 1741 war between England and Spain. In 1741 Vice-Admiral Edward Vernon attacked Cartagena with 23,000 British troops and 186 ships. What followed was a crushing loss for Britain, as the Spanish Admiral Blas de Lezo successfully defended the city, helped in no small way by the defensive strength of San Felipe. The British lost around 10,000 men in the battle, many to yellow fever, with around 3,000 falling during the assault. The city was successfully defended by just 3,000 men and six ships.[57]

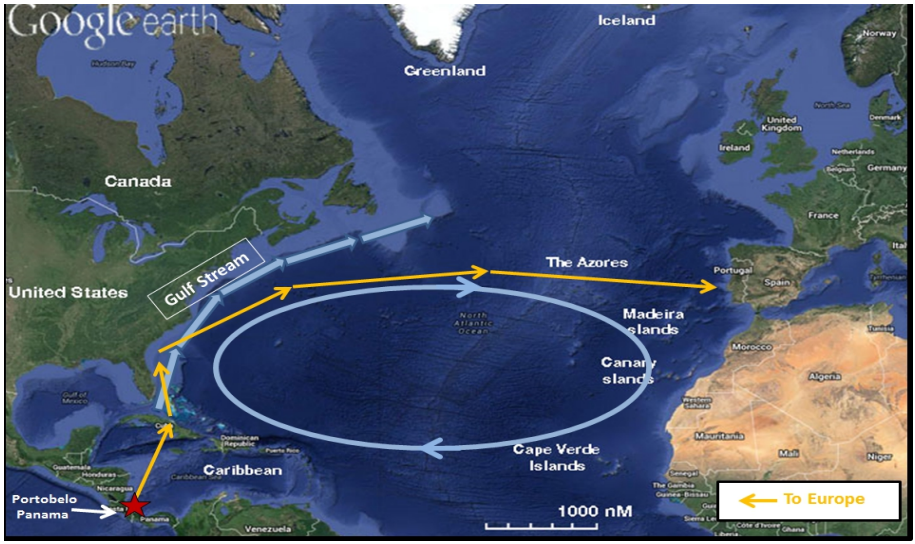
After the province of Cartagena declared its independence from Spain in 1811, a Spanish force led by Pablo Morillo attacked the city in 1815. By the end of the year, Cartagena had fallen and was back in Spanish hands until 1821 when the city was recaptured by local forces.[57]

San Lorenzo – Portobelo, Panama

In 1502, during his fourth and final voyage, Christopher Columbus was caught in a severe storm and forced to seek refuge in a native village along a river on the Isthmus of Panama. According to legend, he named it Puerto Bello (Beautiful Port). Over the centuries, Portobelo developed into a strategic Spanish establishment in the New World as it was well-linked with a stone paved road to Panama City.[58][59]

By 1534, the Monarchy of Spain had, following its conquest of Peru, established a route over the Isthmus of Panama ("Camino Real de Cruces") between the Pacific Ocean and the Caribbean Sea, of which most was the Chagres River.[57] Peruvian treasure was transported by donkey caravans north, along the Pacific coast to

Panama City. Even some of the treasures from Asia and the Philippines, which had crossed the Pacific Ocean by ship to Acapulco, arrived in to Panama City.[60] From Panama City the consolidated treasures would be moved by land to the Isthmus ports on the Caribbean: Nombre de Dios, and later Portobelo for eventual shipping to Spain via Cuba. Tons of gold, silver and other riches from



conquered territories were sent to Spain via Portobelo. Panama became a major part of the legendary Spanish treasure trail and an important site for international trade, particularly between Europe and its new colonies. Control of this area was extremely important to the Spanish Crown.

Attracted to the vast treasures transiting the area, pirates and privateers began attacking Panama's coast around 1560. Spain built Fort San Lorenzo, at the Chagres River's mouth, to protect the Caribbean arrival point of the “Camino Real de Cruces” on the Isthmus of Panama.[59] In 1586, Juan Bautista Antonelli, the same Engineer who worked on Los Tres Santos Reyes del Morro in Havana, prepared the plans for the first of the fortifications on the mouth of the Chagres River. From 1587 to 1599, the fortifications slowly evolved into a powerfull sea-level fortification.

Built upon a cliff overlooking the mouth of the Chagres River in 1595, Fort San Lorenzo was originally constructed out of wood but in 1596 the fort was attacked by the English pirate Sir Francis Drake. The attack was unsuccessful, Drake died of Dysentery during the attack, but it emphasized the importance of the location. The next year on 20 March 1597, the town of San Felipe de Portobelo was officially established.[61]

Even though Portobelo and Fort San Lorenzo were built to bear it all, in 1671 both fell to Welch Privateer Henry Morgan. Morgan and over 2,000 men destroyed the wooden fort, crossed the isthmus and sacked Panama City. For this campaign Morgan used fort San Lorenzo as his base of operations.

This action forced the Spanish to construct a new fort 80 feet above the water on a cliff overlooking the entrance to the harbor during the 1680's. The fort was protected on the landward side by a dry moat with a drawbridge. The town of Chagres was established under the protection of the fort during this time.

In November 1739 Portobelo and Chagres were again attacked by British forces led by Admiral Edward Vernon. The British destroyed the fortress and other key buildings before withdrawing. Although British control lasted just three weeks, the effect on Portobelo was devastating. With Portobelo's fort destroyed, Spain did a complete re-organization of trading practices in Panama. The changes were designed to make trade in the area less vulnerable to attack by strengthening fortifications at Chagres and Gatun so Portobello was largely abandoned.[62]

By the middle of the 18th century the Spanish had largely abandoned the old trails over the isthmus, preferring to sail around the tip of South America at Cape Horn. For over a century, Fort San Lorenzo was just used as a prison. In 1848 gold was found in California stimulating activity at the mouth of the Chagres River. Prospectors would use the ancient “Camino Real de Cruces” in reverse (north to south) on their trip to California. This way they would avoid crossing the "Great American Desert" or rounding Cape Horn on their way to California. They began their crossing at a placed named "Yankee Town” or "Yanqui Chagres”, a wild-west style boomtown that sprang up on the bank opposite the original village and fortress.[63]

The rebirth of Chagres' importance was short-lived. By 1853 arrival of steamboat service on the River had shortened the time needed to cross the isthmus from several days to about twelve hours. In 1855 the Panama Railway was completed from the town of Colon to Panama City, further reducing travel time to about three hours. As a result Colón became Panama's Atlantic/Caribbean port, and Chagres lost importance.[64]

Pacific Coast

San Diego – Acapulco, Mexico

Fort San Diego in Acapulco is the most important maritime fortresses on Mexico's Pacific coast. It is located in a reef, in the current district of Petaquillas. It was built to protect the Port of Acapulco from the threat posed by pirates. Acapulco had become the most important port on the Pacific coast for trade with the Orient, being the point of departure and arrival of the Nao de China galleons crossing the Pacific. It was also the headquarters of the Parian market, where products from the Orient reached Europe via New Spain.

The fort was built by order of Viceroy Diego Fernández de Córdoba, Marqués de Guadalcazár, who commissioned the Dutch engineer Adrián Boot to design and build a fortification. Completed in 1617 it's constructed of stone, in the shape of an irregular pentagon with five bastions joined by walls with parapets. It was given the name of San Diego, in honor of the patron saint of the Viceroy. The bastions were named El Rey, El Príncipe, El Duque, El Marqués and Guadalcazár.

In 1776 there was an earthquake that damaged the fortification to its foundations, so the Spanish engineer Miguel Constanzó presented the viceroy Antonio María de Bucareli y Ursúa with a project for the new fortification. It had adequate bastions for defense thanks to its vaulted enclosures and the moat that surrounded the complex. The proposal was approved, but it was completely modified by Ramón Panón the engineer in charge of construction.[65]

Work began in 1778 and after five years was mostly completed. By 1783 the entire reconstruction was finished. The new fort had room for two thousand soldiers with provisions and drinking water all year round and had 63 large cannons. The bastions were called: San José, San Antonio, San Luis, Santa Bárbara and La Concepción. As a tribute to the reigning monarch it was officially given the name of San Carlos, however the locals continued to call it San Diego.

At the beginning of the Mexican War of Independence in 1810, Don Miguel Hidalgo y Costilla gave José María Morelos the task of spreading the rebellion throughout the south of the country. His first and most important mission was to take Acapulco and Fort San Diego. For months, insurgents and royalists fought intense battles and capturing the Fort became a source of hardship, suffering, hunger and disease. Finally on August 19, 1813, Spanish Captain Pedro Antonio Vélez surrendered to Morelos and raised the white flag over the fort.[66] In later years the fort was used as a monastery, a hospital and as a prison.

Casco Viejo – Panama City, Panama

Panama City, the oldest continuously occupied European settlement on the Pacific coast of the Americas, was founded in 1519, as a consequence of the discovery by the Spanish conquistador Vasco Nuñez de Balboa of the South Sea

(Pacific Ocean) in 1513. The settlement (originally known as Castilla del Oro) was founded on August 15, 1519 by Pedro Arias Dávila and another 100 inhabitants. At the time, it was the first permanent European settlement on the Pacific Ocean, replacing the two cities of Santa María la Antigüa del Darién and Acla. Two years later, in 1521, the settlement was promoted to the status of city by a royal decree and was given a coat of arms by Charles V of Spain, forming a new cabildo. Shortly after its creation the city became a starting point for various expeditions in Peru and an important base where gold and silver passed through on the way to Spain.

In 1539 and 1563, the city suffered a number of fires which destroyed parts of it but did not impede the city's development. In 1610, the city reached a population of 5000, with 500 houses, as well as convents, chapels, a hospital and a cathedral. At the beginning of the 17th century, the city was attacked several times by pirates and by indigenous people from Darién. On 2 May 1620, an earthquake damaged many buildings in the city. On 21 February 1644, the Great Fire destroyed 83 religious buildings, including the cathedral. At this time, there were approximately 8,000 people living in the city.

On 28 January 1671, the Welsh privateer Henry Morgan attacked the city with 1,400 men, marching from the Caribbean coast across the jungle. Morgan's force defeated the city's militia then proceeded to sack Panamá. Either Morgan and his army started a fire or the Captain General Don Juan Pérez de Guzmán ordered the explosion of the gunpowder magazines that burned the city. Either way, the resulting fire destroyed the city. Morgan's attack caused the loss of thousands of lives and Panamá had to be rebuilt a few kilometers to the west on a new site (the current one). Morgan was arrested but, after proving he knew nothing of the recently completed Treaty of Madrid which ended hostilities between England and Spain, was subsequently freed and later rewarded.[67]

The settlement was a first rank colonial outpost and seat of a Royal Court of Justice during the 16th and 17th centuries when Panama consolidated its position as an intercontinental hub. Its growth in importance, as it profited from the imperial bullion lifeline, is reflected by the imposing stone architecture of its public and religious buildings. During its 152 years of existence, the town survived slave rebellion, fire and an earthquake, but was destroyed by a devastating pirate attack in 1671.

In 1673 the city was moved some 7.5 km southeast, to a small peninsula at the foot of Ancón hill, closer to the islands that were used as the port and near the mouth of a river that eventually became the entrance of the Panama Canal. The relocated town, known today as Casco Viejo or the Historic District of Panama, not only had better access to fresh water but could be fortified. The military engineers, moreover, took advantage of the morphological conditions that complemented the wall surrounding the peninsula, all of which prevented direct naval approaches by an enemy. The area within the walls had an orthogonal layout, with a central plaza and streets of different widths; outside the walls the suburb of Santa Ana had an irregular layout. There is a centrally-located main plaza (which was enlarged in the 19th century) and several smaller post-colonial plazas on the fringes.

Most of the seaward walls of the colonial fortifications and parts of the landward bastions and moat survive. Several buildings within the District are identified as important for the country's 17th-20th century heritage. Most outstanding are the churches, above all the cathedral with its five aisles and timber roof; San Felipe Neri, San José, San Francisco and especially La Merced with its well-preserved colonial timber roof. The Presidential Palace originally built in the late 17th century and partially reconstructed in the 18th, 19th and early 20th centuries, is an example of the transformations that characterize the district as a whole.

Particularly relevant is the Salón Bolivar, originally the Chapter Hall of the convent of San Francisco, which is the only surviving part of the 17th-18th century complex. The Salón Bolívar has special historical importance as the site of the visionary, but abortive attempt by Simón Bolivar in 1826 to establish what would have been the world's first multinational and continental congress.[68]

REFERENCES

1. https://www.britannica.com/technology/privateer
2. https://scied.ucar.edu/shortcontent/highs-and-lows-air-pressure
3. https://climate.ncsu.edu/climate/patterns/nao
4. https://forecast.weather.gov/glossary.php?word=icelandic+low
5. https://weather.umd.edu
6. http://ww2010.atmos.uiuc.edu/(Gh)/guides/mtr/hurr/mvmt.rxml
7. https://scijinks.gov/gulf-stream/
8. https://outrunchange.com/2015/11/27/time-to-cross-the-atlantic-500-year-history/
9. https://www.worldhistory.org/Spanish_Treasure_Fleets/
10. https://www.britannica.com/place/Spanish-Main
11. https://cnso.nova.edu/messing/strait-of-florida/
12. https://indianrivermagazine.com/how-we-became-the-treasure-coast/
13. https://jis.gov.jm/information/jamaican-history/
14. https://www.guampedia.com/la-nao-de-china-the-spanish-treasure-fleet-system/
15. https://www.britannica.com/place/Santo-Domingo
16. https://exploration.marinersmuseum.org/subject/francisco-pizarro/
17. https://www.bbc.co.uk/history/historic_figures/cortes_hernan.shtml
18. https://www.ecured.cu/Fortaleza_Ozama_(Rep%C3%BAblica_Dominicana)
19. *Van Middeldyk, R. A. (2008).The History of Puerto Rico. Teddington, UK: Echo Library. ISBN 978-1-4068-7497-6*
20. https://www.nps.gov/saju/faqs.htm

21. https://enciclopediapr.org/en/encyclopedia/attack-of-pirates-and-corsairs-to-puerto-rico/
22. https://workmall.com/wfb2001/puerto_rico/drake_s_attack_on_san_juan_1595.html
23. https://www.nps.gov/saju/learn/historyculture/el-morro.htm
24. https://www.revolvy.com/page/Battle-of-San-Juan-%281625%29
25. https://www.nps.gov/saju/learn/historyculture/index.htm
26. https://books.google.com/books?id=46SVHOMozCQC&pg=PA62&lpg=PA62&dq=earl+of+cumberland+attacks+san+juan&source=bl&ots=7PbySUZsrV&sig=ACfU3U3LEP7TDzmkDU5OItuZH3y2Z49UNg&hl=en&sa=X&ved=2ahUKEwizvpHswMzjAhULpFkKHU5PDlEQ6AEwCXoECAkQAQ#v=onepage&q=earl%20of%20cumberland%20attacks%20san%20juan&f=false
27. https://history.state.gov/milestones/1866-1898/spanish-american-war
28. https://www.nps.gov/saju/learn/historyculture/san-cristobal.htm
29. https://www.nps.gov/saju/learn/historyculture/san-juan-de-la-cruz.htm
30. https://www.newworldencyclopedia.org/entry/Old_Havana
31. https://www.encyclopedia.com/humanities/encyclopedias-almanacs-transcripts-and-maps/el-morro-havana
32. https://www.castles.nl/el-morro-castle
33. https://history.state.gov/milestones/1750-1775/treaty-of-paris
34. https://babel.hathitrust.org/cgi/pt?id=loc.ark:/13960/t7pn9x23d&view=1up&seq=9
35. https://www.nps.gov/casa/learn/historyculture/construction.htm
36. https://www.nps.gov/casa/learn/historyculture/coquina-the-rock-that-saved-st-augustine.htm
37. https://www.loc.gov/resource/hhh.fl0095.sheet/?sp=12
38. http://ufdc.ufl.edu/UF00100493/00001/1i

39. https://www.nps.gov/casa/learn/historyculture/forged-in-conflict.htm
40. https://www.nps.gov/casa/learn/historyculture/the-british-period.htm
41. https://www.sam.usace.army.mil/Portals/46/docs/recreation/OP-CO/montgomery/pdfs/10thand11th/ahistoryofsteamboats.pdf
42. https://americanhistory.si.edu/collections/search/object/nmah_842432
43. https://history.state.gov/milestones/1801-1829/florida
44. https://www.nps.gov/casa/learn/historyculture/the-civil-war-in-florida.htm
45. https://www.militaryfactory.com/ships/detail.asp?ship_id=uss-wabash-steam-frigate-united-states
46. https://www.nps.gov/casa/learn/historyculture/seminole-incarceration.htm
47. https://www.nps.gov/casa/learn/historyculture/plains-indians.htm
48. https://www.nps.gov/casa/faqs.htm
49. https://www.nps.gov/foma/learn/historyculture/index.htm
50. https://www.nps.gov/foma/learn/historyculture/fort-mose.htm
51. https://www.nps.gov/nr/travel/american_latino_heritage/fort_mose.htm
52. https://www.sanjuandeulua.inah.gob.mx/historia
53. https://ipfs.io/ipfs/QmXoypizjW3WknFiJnKLwHCnL72vedxjQkDDP1mXWo6uco/wiki/Battle_of_San_Juan_de_Ul%C3%BAa_(1568).html
54. https://www.raabcollection.com/foreign-figures-autographs/charles-iii-1767
55. https://www.encyclopedia.com/humanities/encyclopedias-almanacs-transcripts-and-maps/san-juan-de-ulua
56. https://theculturetrip.com/south-america/colombia/articles/a-brief-history-of-san-felipe-castle-cartagena/
57. https://www.cartagenaexplorer.com/history-of-cartagena-comprehensive/

58. https://www.coloncity.com/portobelo2.html
59. https://www.academia.edu/9868115/camino_real_de_cruces_-_Panama
60. https://www.guampedia.com/la-nao-de-china-the-spanish-treasure-fleet-system/
61. http://www.czbrats.com/PanamaViejo/SanLorenzo.htm
62. https://www.coloncity.com/portobelo2.html
63. https://goldrush49.weebly.com/panama-short-cut.html
64. https://www.academia.edu/5799679/Reconnaissance_Mouth_of_the_R%C3%ADo_Chagres_Panama
65. https://lugares.inah.gob.mx/en/museos-inah/museo/463-museo-hist%C3%B3rico-de-acapulco-fuerte-de-san-diego.html
66. https://web.archive.org/web/20120119034158/http://www.fuertedesandiego.inah.gob.mx/acerca_de.htm
67. https://www.gpsmycity.com/attractions/panama-viejo-(old-panama)-35749.html
68. https://whc.unesco.org/en/list/790/

ABOUT THE BOOK:

Shortly after Christopher Columbus arrived in the Americas, European monarchs realized the immensity of the lands he had stumbled on. But to exploit these riches they had to control the sailing routes between Europe and the New World so a struggle to control these routes began. Decades later a pattern of fortified locations emerged which, centuries later is still apparent. Although hundreds of forts were built in the new world during the colonial era, only a few emerged as strategically significant.

This booklet identifies strategic Spanish colonial era forts, provides a short historical overview and explains their importance from a military officer's perspective. It provides basic information and hopefully inspires others to research this topic further.

ABOUT THE AUTHOR:

Galín Hernández was born and raised in Aguadilla, Puerto Rico in the same area where Christopher Columbus landed in 1493 during his second voyage to the new world. He graduated from the Community College of the Air Force (AAS), Cleveland Institute of Electronics (Broadcast Engineering), Inter American University of Puerto Rico (BA), Embry-Riddle Aeronautical University (MAS), Air Command & Staff College and the Air War College. He is an FCC licensed Electronics technician, an FAA licensed Commercial Pilot and is fluent in both English and Spanish.

The author in historically accurate mid 1700's Spanish Militia Artillery uniform with a working replica Spanish fusíl.

From 2002 to 2007, Galín taught at the Federal Law Enforcement Training Center in Brunswick, Georgia. During 2003 he was the Commander of the 491st Aeromedical Evacuation Squadron, Det-2, Ramstein Germany during Operation Iraqi Freedom. From 2007 – 2010 he served as the DHS Attaché at the U.S. Embassy, El Salvador and for a while as Regional DHS Attaché for all Central America.

In retirement Galín volunteers at the Castillo de San Marcos National Monument in St. Augustine, Florida with the Historic Weapons section. He is qualified on 1700's Spanish cannon crew positions and flintlock muskets. Galín has visited most of the forts in this book and hopes to visit the rest in the near future.

You can view Galín's videos on historic topics at:
www.youtube.com/@militiagalin/videos

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