

AMADOR AND FORT GRANT

What is now Amador and the Causeway, stretching out from Panama City into the Pacific Ocean and Panama Bay, and shielding the entrance to the Panama Canal, a place of entertainment, was for decades the heart of the US defences of the Pacific end of the Canal.



The Amador Causeway today

What became the Amador Causeway was begun in 1908, as construction of the Canal was underway, using rock from the Culebra Cut (then called the Gaillard Cut)¹, which was

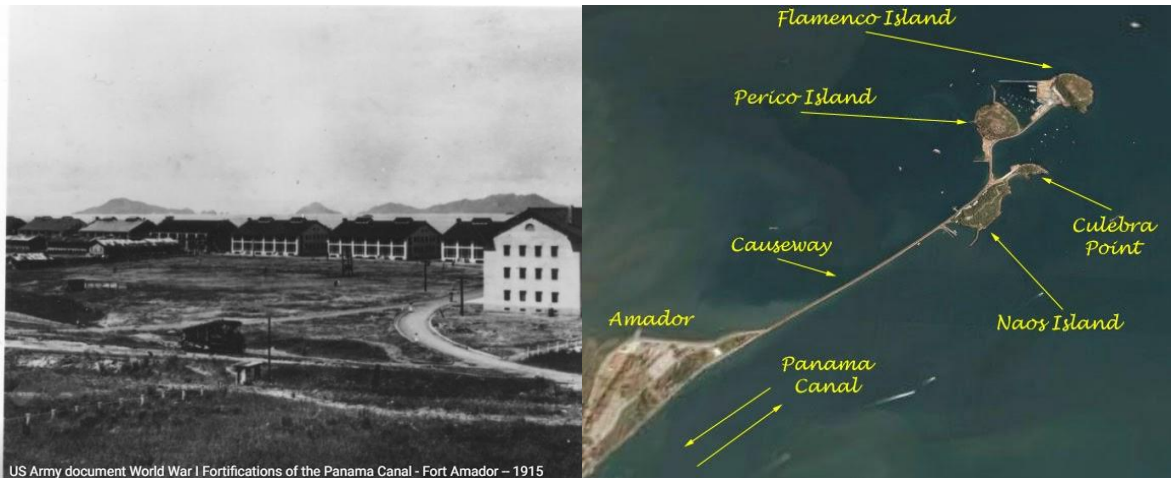
essentially an artificial valley which connects the equally artificial Lake Gatun with the Bay of Panama, 12.6 km (7.8 miles) long and some 26 metres (85 feet) above sea-level. The material was brought to the coast by rail, to provide a breakwater for the Canal entrance.

The area which would become Fort Amador began as little more than a broad stretch of mud flats and swamp, and had been used as a dump for material removed from the Canal – and was then known as the “Balboa Dumps”. The Isthmian Canal Commission, which was established in 1899 to construct the Canal and ran the Canal Zone from 1904,² had already begun building a breakwater from the dump area to Naos Island to protect the Canal entry channel from cross currents. It would be this breakwater that would later be extended to connect Naos with the other three islands. The muddy flats on both sides of a portion of the

¹ Named for the US Army Corps of Engineers in charge of the project, but who died in 1913, before the Canal opened, and the Cut was named in his honour in 1915.

² The ICC ceased to exist on 1 April 1914, with the Canal essentially completed, and a new administrative entity, the Canal Zone Governor, was officially established.

breakwater were filled in to create what became Fort Amador. The Army began work in August 1911, in preparation for the construction of the Pacific fortifications.³



The islands of Naos, Flamenco and Perico were linked to the mainland at Amador by 1912, although filling continued to 1914.

Becoming operational from 1912,⁴ to guard the Pacific approaches to the Canal, Amador was to become a major military base (with a naval headquarters alongside), with the islands fortified to provide defence of the Canal. As Fort Grant, operations began in 1914, to support coastal artillery units for the defence of the Canal, with the original defences completed in 1917. Fort Grant would be the name given to the Causeway, connected and offshore islands (and later Fort Kobbe across the shipping channel), and Fort Amador the mainland portion. The latter was the principal Coast Artillery Corps fortification for defending the Pacific entrance to the Panama Canal, and the Army sector of Amador served as headquarters for the Coast Artillery District 1919-47, and as the senior Army command in Panama from 1947-79.⁵

³ <https://armyhistory.org/fort-grant-and-fort-amador-panama-canal-zone/>

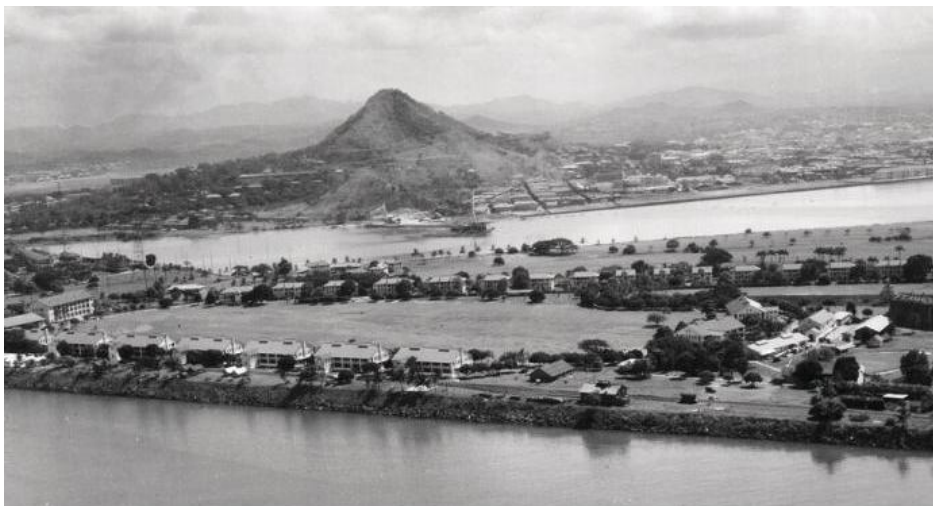
⁴ Designated by the War Department GO No 153 of 25 November 1911 as a single military reservation.

⁵ It was headquarters of the US Army high command in Panama from 1947 to 1979 – the Caribbean Army Command (1947-63), through the US Army Southern Command (1963-74), to the 193rd Infantry Brigade (Canal Zone). The Army headquarters moved to Fort Clayton in September 1979.



By the time of completion in 1917, Fort Amador initially comprised three field grade officers' quarters, stables and a wagon shed, eight company-size barracks, four four-family quarters, six two-family quarters, five NCO

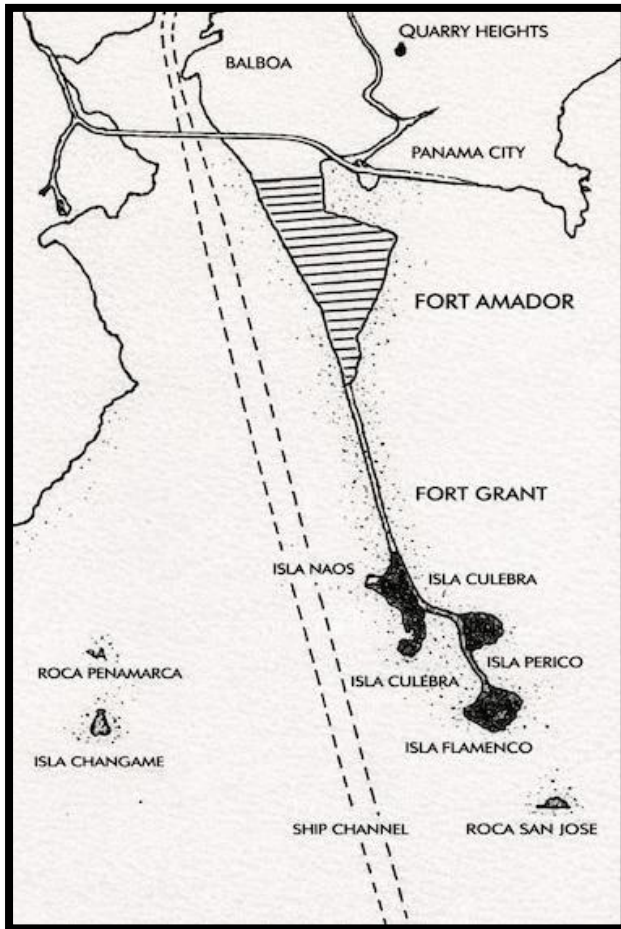
officers' quarters, a commanding officer's quarters, a headquarters building, water and sewer system, and paved roads.⁶



View of Fort Amador in the foreground, with Cerro Ancón and Panama City. The image corresponds to the 1930s (Library of Congress)

During the two world wars it was said that this was the most heavily fortified place in the world – although the value and effectiveness of the defences would come into question during World War 2. It would remain US territory, part of the Canal Zone, until the final portions reverted to Panama in 1999.

⁶ <https://armyhistory.org/fort-grant-and-fort-amador-panama-canal-zone/>



Also part of what became “Fort Grant” were the offshore islands San Jose,⁷ Panamarca,⁸ Changarmi,⁹ Tortolita, Torola, Coroviceta, Cocovi, Venado, and the largest, Taboga.¹⁰ Being some 7.5 miles (12 km) south of the vital Miraflores Locks, the Fort and its “Fortified Islands” were strategically placed to engage a hostile naval force before it could come within range of the Canal’s vital installations.¹¹

In 1911, Fort Grant and Fort Amador were designated by the War Department as a single military reservation.¹² Although officially designated as Fort Amador, the entire

area was commonly referred to as Fort Grant for a number of years.¹³ In designating Canal fortifications sites and military reservations, the terms of reference used in early orders were said to be relatively loose.

⁷ A small islet beyond Flamenco, which might have been the next stage of the Causeway, if this had been considered practical or necessary.

⁸ Small, described as a “roca”, rather than an “isla”, and on the opposite side of the shipping channel, alongside Changarmi.

⁹ An islet on the opposite of the shipping channel, close to Pennamarca.

¹⁰ <https://ufdc.ufl.edu/AA00022175/00001/pageturner#page/35>

¹¹ <https://armyhistory.org/fort-grant-and-fort-amador-panama-canal-zone/>

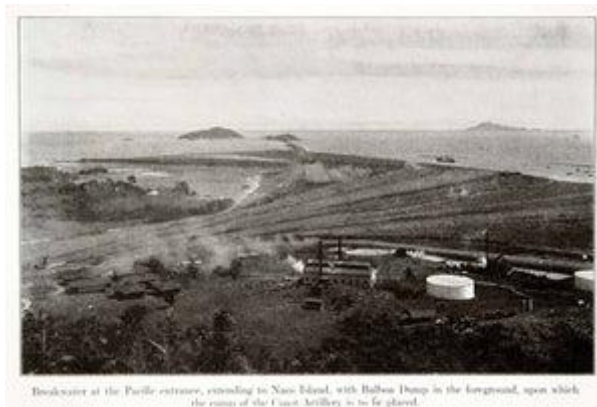
¹² GO No 153 (25 November 1911).

<https://armyhistory.org/fort-grant-and-fort-amador-panama-canal-zone/>

¹³ Fort Grant was named to commemorate Grant's earlier crossing the isthmus to that point. On 5 July 1852, the future US President, then Captain Ulysses Grant, in command of a company of the 4th Regiment of Infantry, left Fort Columbus, New York, for his new duty station at San Francisco. Their route took the regiment by sea to the Atlantic coast city of Colón, where they disembarked and crossed the Isthmus to Panama City. There, a ship waited to carry the troops on the final leg of their journey to San Francisco, he spending several weeks on Flamenco.

The military reservation included large artillery batteries on the various islands, as well as a controlled mine complex¹⁴, and quarters for eight companies of coast artillery were built on the former Balboa Dump area.¹⁵ This latter recovered area, originally covered by water, had the effect of widening the inner part of the breakwater, on which a radio station, quarantine station, fuel oil plant and tank farms were built.

The first Army unit to be assigned to Fort Amador was the 81st Company, Coast Artillery, on 31 December 1913.



1913 print of the Pacific entrance area, Naos and Balboa Dump

Stretching out into the bay, the outer part of the breakwater was 6,500 feet (1.981 metres) long, with a width of 40 feet (12.2 metres), and about 18 feet (5.5 metres) above sea-level. A road and a railway line were laid along the breakwater.¹⁶ The railway, which had been built to aid in the construction of the breakwater, remained in place and was used to transport ammunition to supply the guns located on the islands.¹⁷ When two railway guns were placed in service during the late 1920s, the railway line was used to bring the guns to their firing positions on Culebra Island, where its remnants can be seen in the Smithsonian Institute premises there.¹⁸

¹⁴ These sea mines protected the approaches to the Canal and Balboa harbour and were controlled by land stations and operated by the US Army. While the composition of this underwater defence varied between 1916 to 1950, by the end of World War 2 it comprised an outer defence of 16 groups of 13 M4 ground mines and an inner defence of 10 groups of 13 M4.

¹⁵ A former mangrove swamp area

¹⁶ <https://armyhistory.org/fort-grant-and-fort-amador-panama-canal-zone/>

¹⁷ <https://www.usni.org/magazines/proceedings/1916/november/terminal-facilities-panama-canal>

¹⁸ <https://weaponsandwarfare.com/2019/11/19/defense-of-panama-canal-batteries-and-accommodation/>

¹⁸ <https://armyhistory.org/fort-grant-and-fort-amador-panama-canal-zone/>



It had been proposed to name one of the artillery batteries in honour of Dr Manuel Amador Guerrero, the first President of the Republic of Panama. However, this was not thought by Panamanians to be a suitable honour and it was

subsequently decided to name the whole mainland portion of Fort Grant in honour of President Amador. Even then, it was not until 1917, when the widow of President Amador protested the failure to use the proper name, that the Commanding General of Panama Canal Department (the US Army command in the Canal Zone), issued an order directing that the proper name be used.¹⁹



A photo of the early days of the breakwater²⁰

A further, later addition to Fort Amador, on the other side of the shipping channel and approach to Balboa harbour and the Canal, was Fort Kobbe. The Bruja Military Reservation,²¹ originally a small defensive position from 1918, was established as a permanent separate military post in 1928,²² and redesignated as Fort Bruja on 2 February 1929, before being renamed Fort Kobbe in 1932, with part of it becoming Bruja Point

¹⁹ Order No.16, 19 October 1917.

<https://armyhistory.org/fort-grant-and-fort-amador-panama-canal-zone/>

²⁰ <https://pcmc.domains.uflib.ufl.edu/2023/11/>

²¹ Bruja means "witches".

²² Executive Order No 4947 dated 11 August 1928.

Airfield (later Howard Airfield).²³ It was incorporated as a sub-post of Fort Amador from 1929 until 1941.



Fort Amador in 1919...and in the 1920s

In 1939, *Casa Caribe*, a 6-unit distinguished visitors centre was built, being a two-story, raised structure with a wooden frame. The Fort Amador Officers Club was built in 1941 as a bowling alley. A baseball field was laid out on the parade ground.²⁴

Fort Kobbe was expanded considerably and, from June 1941, it was separate from Fort Amador as part of an independent post that also included Howard Field,²⁵ and a pair of gun batteries (Haan and Murray).²⁶

Culebra Island

Alongside Naos, this small islet would host a site for a 14-inch (355 mm) railway gun and, when in use, this was designated Battery No.8. The railway line (still visible today when one visits the Smithsonian Institute centre) ran back along the Causeway past Fort Amador, where it connected to the Panama Railroad. Also, there was Battery V, aka Battery 10B, with two 155 mm (6-inch) guns on Panama mounts (not removed until 1948), and two

²³ Being named for a Major General William A Kobbe, an artillery officer from the Spanish-American War and who had died in 1931, and in recognition of his contributions as an instructor in the development of tactical doctrine on the employment of artillery.

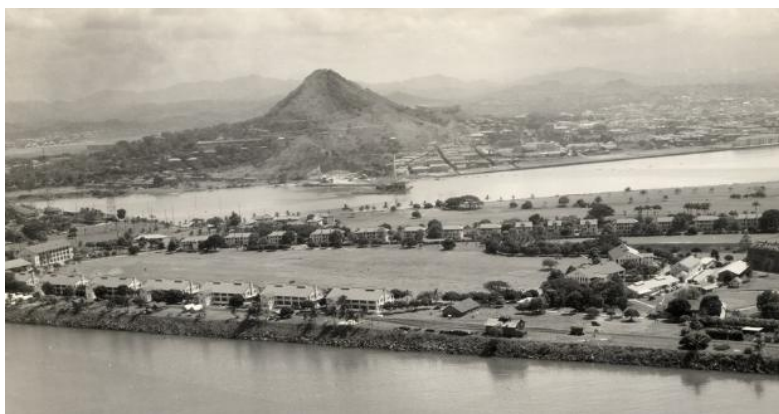
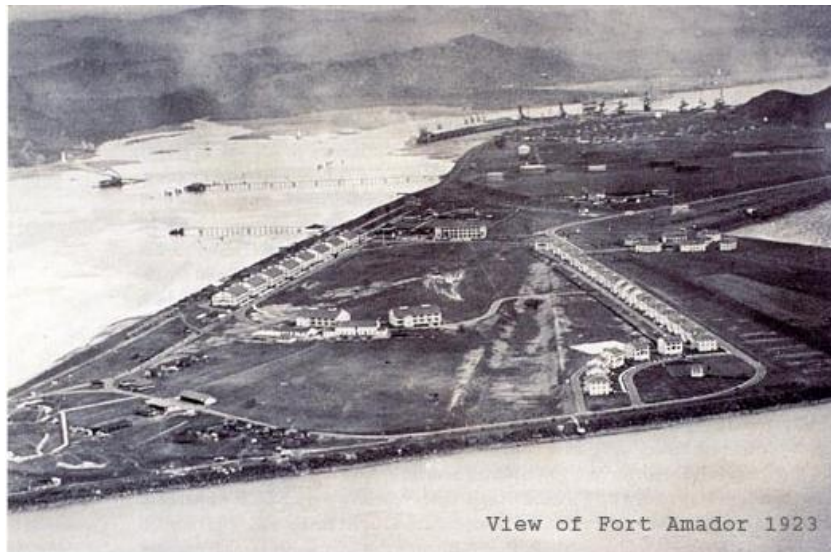
²⁴ *Panama Canal Townsites* (Panama Canal Museum, 2011)

<https://ufdc.ufl.edu/AA00032191/00002/pdf>

²⁵ <https://ufdc.ufl.edu/AA00022175/00001/pageturner#page/43>

²⁶ For views of the Murray Battery as it appears in 2021 see <https://mochilliando.com/2021/05/03/urbex-explorando-el-bunker-battery-murray-panama-pacifico-mochilliando/> and the area is said to provide several beautiful trails for walking or cycling...and is "highly recommended to go with your family and friends".

mobile 75mm (3-inch) guns for beach defence as Battery AW. The 14-inch railway guns, a newer type than those in fixed installations, had a maximum range of around 48,000 yards (27 miles).



Fort Amador in the 1930s

Flamenco Island

The outermost island, at its summit was Battery Warren, which mounted two 14-inch guns on “disappearing carriages”.²⁷ These could cover the entire seaward approach to the Canal entrance, except for a small dead space behind the island of Taboga. The guns were last fired in December 1944, being removed, and scrapped in 1948. On the landward side of the island there were three mortar batteries, with 12-inch (305 mm) mortars, all of which would be scrapped in 1943.

²⁷ The disappearing carriage was developed in the 19th Century, and the theory was that the gun could crouch behind 20 feet (6 metres) of concrete, with another 20-30 feet (6-10 metres) of hard packed earth in front of that, it would rise up to fire, then return to crouch down behind its barrier, and thus be invisible from the sea.



Battery Warren HAWK SAMs operated by 517th Artillery from the early 1960s. (National Archives)

Its batteries were Warren,²⁸ begun in 1912 and mounting 14-inch guns 1942-48 - which was later used from 1950 for mobile 120 mm anti-aircraft guns, and in 1960-70 as a MIM-23 HAWK surface-to-air missile site; Battery U (aka Battery 10A) and Battery T, both with two 155 mm guns on Panama mounts²⁹; and the mortar Batteries Prince, Merrit and Carr (all operational 1912-43). These 14-inch guns had a range of around 24,000 yards (13.6 miles). During construction of Battery Warren, a special heavy-lift elevator was installed in a vertical shaft which was sunk 200 feet (61 metres) from the summit to connect with a horizontal tunnel which was entered from the mortar batteries on the north side of the island.

After transfer to Panamanian control, the Panama Defense Forces' UESAT (*Unidad Especial de Seguridad Antiterror*), the special anti-terrorism security unit, along with dictator General Noriega's bodyguard, was based on Flamenco until October 1989.³⁰ Also headquartered at Amador was a military police battalion.³¹

²⁸ Named in honour of Major General Gouverneur K Warren, a US Civil War soldier and engineer, whose statue at Gettysburg commemorates his role in the defence of Little Round Top.

²⁹ Developed in Panama by the Army in the 1920s, this mount involved small wheels on the trail arms which ran in a track that encircled the gun, allowing it to swing through 360°. It was widely used before and during World War 2. The mounts could be constructed as either full, three-quarters or half circles of steel rail set in concrete with a diameter of approximately 36 feet (11 metres). A concrete column with a diameter of 10 feet (3 metres) was constructed in the centre of the circle to support the gun and carriage. The concrete column was connected to the outer concrete ring by concrete beams for alignment/stability. Originally traverse was accomplished with several men and prybars to move the trailing arms around the steel ring. Later installations included a geared steel ring just inside of the outer steel rail for improved traverse.

https://en.wikipedia.org/wiki/Panama_mount

³⁰ It relocated to Panama Viejo after an attempted coup in October, shortly before the US invasion.

³¹ https://arsof-history.org/arsof_in_panama/pdf/tab_c/pdf_order_of_battle_cmh.pdf



A “disappearing” 14-inch coastal artillery gun, 25 years old in 1941, probably at Battery Warren on Flamenco Island. The gun had a range of 13.64 miles. Beneath each were a powder magazine and shell store. A lift descended 250-feet to a shoreline railway siding tunnel

Fort Amador

The coastal defence batteries at Fort Amador itself consisted of Birney and Smith, with 6-inch (152 mm) guns, and both in use 1913-43. Battery 7A was added, as an Anti-Motor Torpedo Boat (AMTB) battery with 90 mm guns in 1942-48, with these guns too were disarmed and buried.



Fort Grant

Its batteries were Battery 23, with three 3-inch (76 mm) guns in the 1920s; and Battery AX, with two mobile 75mm guns. Battery AY, with four mobile 75mm guns, was located on the causeway to Fort Amador.



1932 aerial photo of Fort Amador³²



One of the two 14-inch two railway guns on Culebra Island is shown here in a 1932 photograph. The two guns on Culebra Island had a maximum range of 48,000 yards (27 miles). (National Archives)³³

Fort Kobbe

Part of Fort Amador until 1941, although wholly physically separate from Amador and the Causeway, its defences guarded the approaches to Balboa harbour and the Canal entrance. Its batteries were Murray, with 16-inch guns 1924-48 (casemated in 1942)³⁴ near Bruja Point; Haan, with 16-inch guns 1928-48, on Batele Point; Battery 6 with 90 mm anti-motor torpedo boat guns 1942-48 on Batele Point; Battery 3 and Battery 3A (aka Battery Z) on Bruja Point had four 155mm guns; and Battery AZ, with two 4.7-inch guns (replaced by mobile 75mm guns in 1919) at Bruja Point.

³² <https://armyhistory.org/fort-grant-and-fort-amador-panama-canal-zone/>

³³ <https://armyhistory.org/fort-grant-and-fort-amador-panama-canal-zone/>

³⁴ A casemate, in this context, being an armoured (or concrete) gun emplacement structure.

Naos

On Naos were the gun batteries Buell and Burnside,³⁵ both with 14-inch guns in use 1912-48. Considered obsolete by 1943, they were last fired in November 1943 and were not manned after 1944, being eventually removed for scrapping in 1947 or 1948 (being reportedly dumped at sea in 1946).³⁶ The 16-inch guns were said to be able to cover virtually every possible approach to the Pacific entrance of the Canal.

There was also Battery Parke³⁷. Battery Parke was equipped with two 6-inch guns on disappearing carriages, each with a range of 6,000 yards (3.5 miles). The armament was removed and dumped at sea in August 1946. Located on the island's waterline, it was destroyed in 2004 to make room for a large residential condominium structure.³⁸

On the north side of Naos was a mine storehouse, cable tank house, explosive magazine, loading room, mine casemate, power plant, and mine boathouse and wharf to support the controlled mine defences of the approaches to the Canal. A fleet of Army mine planters, distribution box boats, and yawls were stationed at Naos Island. Three ordnance workshops were also located on the island. Behind these buildings were long staircases that ran up to Batteries Burnside and Buell for gun crew access.³⁹

The batteries' gun emplacements were later used for storage of civil defence supplies and for the US Army Forces, Southern Command, Museum until 1 October 1979, when Naos was transferred to Panama. The island was latterly used by the Panamanian military to 1989.⁴⁰

The top of the Island and the batteries were later filled in to prepare for the construction of a hotel (that was never built), and their fire control stations were demolished to permit the construction of a large water tank. The control mine complex is currently occupied by the

³⁵ Named in honour of Major General Don Carlos Buell, a Civil War general, and Major General Ambrose E Burnside, a Civil War general and one-time commander of the Army of the Potomac.

³⁶ By World War 2, the 14-inch rifles were considered obsolete, and although they were fired as late as 15 November 1943, they were not manned in 1944-45.

<https://si.maps.arcgis.com/apps/Cascade/index.html?appid=e65d5058a32a4b939965915b61aab678>

³⁷ Named in honour of Major General John G Parke, a Civil War general and engineer.

³⁸ <https://armyhistory.org/fort-grant-and-fort-amador-panama-canal-zone/>

³⁹ <https://armyhistory.org/fort-grant-and-fort-amador-panama-canal-zone/>

⁴⁰ In other words, until the US invasion.

Smithsonian Tropical Research Institute's Marine Laboratories,⁴¹ and remnants of the gun batteries can still be seen, and the Smithsonian turned the 14-inch railway gun ammunition storage into exhibit and conference space.⁴²



A 1932 aerial photograph shows the four fortified islands of Fort Grant. In the foreground is Flamenco Island with two 14-inch guns on the summit. Directly behind it is Perico Island with one 16-inch gun, while to the left are Culebra Island with two 14-inch guns, and behind it is Naos Island with four 14-inch guns at the top of the island. (National Archives)⁴³

Perico

This island was host to Battery Newton,⁴⁴ with a 16-inch gun in 1915-43,⁴⁵ and Battery AV with two mobile 75 mm guns. There were also two 105 mm (4-inch) anti-aircraft guns installed in the 1930s. There was also a railway to the top of the island to aid construction and then ammunition resupply. The Army also built a special concrete staircase to allow the gun crew to scramble up from their barracks near the seashore to the gun emplacement. However, the 16-inch gun was dismounted and scrapped in 1943.

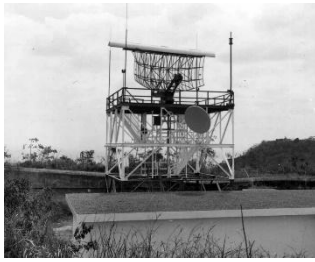
⁴¹ <https://stri.si.edu/visit/punta-culebra>

⁴² <https://armyhistory.org/fort-grant-and-fort-amador-panama-canal-zone/>

⁴³ Ibid.

⁴⁴ Named in honour of Major General John Newton, a Civil War general and engineer, and a former President of the Panama Railroad Company (1888-95).

⁴⁵ This gun was transferred from Sandy Hook, New Jersey in 1915. It was the largest US Army weapon at the time of its manufacture in 1902. The 16-inch M1919 35-calibre gun had been mounted on an M1917 carriage as part of the Long Island Sound defences on Great Gull Island (Fort Michie). It had a nominal range of 22,600 yards and a traverse of 170 degrees, but a limited elevation of only 20 degrees on the disappearing carriage used in Battery Newton resulted in its 2,400 lb shell traveling only a relative short distance.



Perico Island radar site first operated by the FAA and later by the Panamanian Autoridad Aeronáutica Civil. (National Archives)

Postwar, as on Flamenco, a MIM-23 HAWK missile battery was installed. The site was later used for a civilian radar installation for the US Federal Aviation Agency, and later by the Panamanian *Autoridad Aeronáutica Civil*.⁴⁶

Turned over to Panama in 1979, during the Noriega era it was used by UESAT, the Panama Defense Force commando force.



A range indicator

Taboga

Formally part of Fort Amador/Fort Grant, this large island lies near the Pacific entrance to the Canal. During World War 1, the island had been used as an internment site for Germans, a role for which it would be used in World War 2, with Japanese and other internees.

During World War 2, there was a PT Boat training base on the island, as well as searchlights, anti-aircraft guns and bunkers, all of which were finally abandoned by the US military in 1960.

⁴⁶ <https://si.maps.arcgis.com/apps/Cascade/index.html?appid=e65d5058a32a4b939965915b61aab678>

Also on the island was Hotel Aspinwall,⁴⁷ which had begun as a sanatorium (originally for those with leprosy), which had been a hotel since 1914, though damaged by a fire in 1923. During World War 2, the Army began using it as an administration building, but later relocated to a new site at the top of the mountain. By 1945, the hotel had been completely abandoned and was demolished.⁴⁸

Additional batteries were on the small offshore islands. Battery W, aka Battery 1B, with four 155 mm guns on Panama mounts, and Battery 2B, on Taboguilla; Battery X with two 155 mm guns on Panama mounts on Urava. On Taboga itself was Battery Y, aka Battery 1A, with two 155 mm guns.

Furthermore, on the mainland, across the bay from the Causeway, at Paitilla Point there was a battery with four 155mm guns and Battery AU with two fixed 4.7-inch (120 mm) guns, which were replaced in 1919 by two 75mm guns), and four mobile 75mm guns.

In support there were numerous searchlight positions, including on Venado Island, Bruja Point, Taboga, Taboguilla, Naos, Flamenco Island, the San Jose Rock, Perico and at Paitilla Point.

Although the coastal artillery guns were fired on a regular basis, between 1929 and 1939 *“shortages of funds and personnel resulted in many of the big seacoast guns being placed in caretaker status... In the years immediately preceding the US entry into World War 2 all guns were rehabilitated, tested, and placed in service status”*.⁴⁹

The original batteries remained in service until 1943, when the guns were removed, and the structures would be buried. The Amador area was then used for housing. A 90 mm Anti-Motor Torpedo Boat (AMTB) Battery was put in place in 1942; but it, too, was disarmed and buried in 1948.

⁴⁷ Named in honor of an engineer, W H Aspinwall, who had become famous during construction of the Panama Railroad in the 19th Century.

⁴⁸ <http://www.alonso-roy.com/era/era-51-eng.html>

⁴⁹ <https://weaponsandwarfare.com/2019/11/19/defense-of-panama-canal-batteries-and-accommodation/>



Batteries Merritt, Prince and Carr in 1965

The Navy presence

The US Navy sector of Amador served as the US Navy headquarters from 1918 to 1993, with the 15th Naval District Headquarters (established in 1925, and disestablished 1976), which moved to the newly-built Bryan Hall at Fort Amador in 1941. At its wartime peak, the District had on strength a total of 779 officers and 7,725 enlisted men.⁵⁰ This area was restored to Panama in 1996.⁵¹



15th Naval District Headquarters in Amador in 1967

Restoration to Panama

Part of Fort Amador was transferred to the Panamanian Government in 1979, together with the islands that comprised part of Fort Grant, and the rest (including the Navy sector) in 1996.⁵²

⁵⁰ *Historic Resources Assessments: Department of Defense Activities 1993* (Panama Canal Treaty Implementation Plan Agency, Washington DC, 1995).

⁵¹ http://william_h_ormsbee.tripod.com/bases_summ_p01.htm

⁵² http://william_h_ormsbee.tripod.com/bases_summ_p01.htm

After 1979, as joint administration by the US and Panamanian authorities began in the lead-up to the eventual surrender of the Canal to Panama, the area gradually became a tourist attraction.

Panama's National Marine Force (*Marina Nacional*), established in 1969, would have its headquarters at Fort Amador (known as *Fuerte Amador* in Spanish).⁵³

Naos was used by the Panamanian military until 1989 (when the US invasion, Operation *Just Cause*, took place in December), and much of the post became headquarters of the Panamanian Defense Force until 1989.⁵⁴

Flamenco Island was used as a prison until 1989, and again subsequently. From 1989, following the US invasion, it was handed over to the Panamanian national maritime service until this later moved to the former Rodman US Naval Station in 1999.⁵⁵



Ernesto Pérez Balladares, receiving a symbolic key from U.S. General Wesley K. Clark during the transfer ceremony of Fort Amador on October 1, 1996.

During Operation *Just Cause*, Fort Amador was secured by infantry supported by Sheridan tanks (the operation starting at 0100 on 20 December, Fort Amador was secured by 1030).⁵⁶ Portions of the post remained under US control until it was completely transferred to Panama on 1 October 1996.⁵⁷

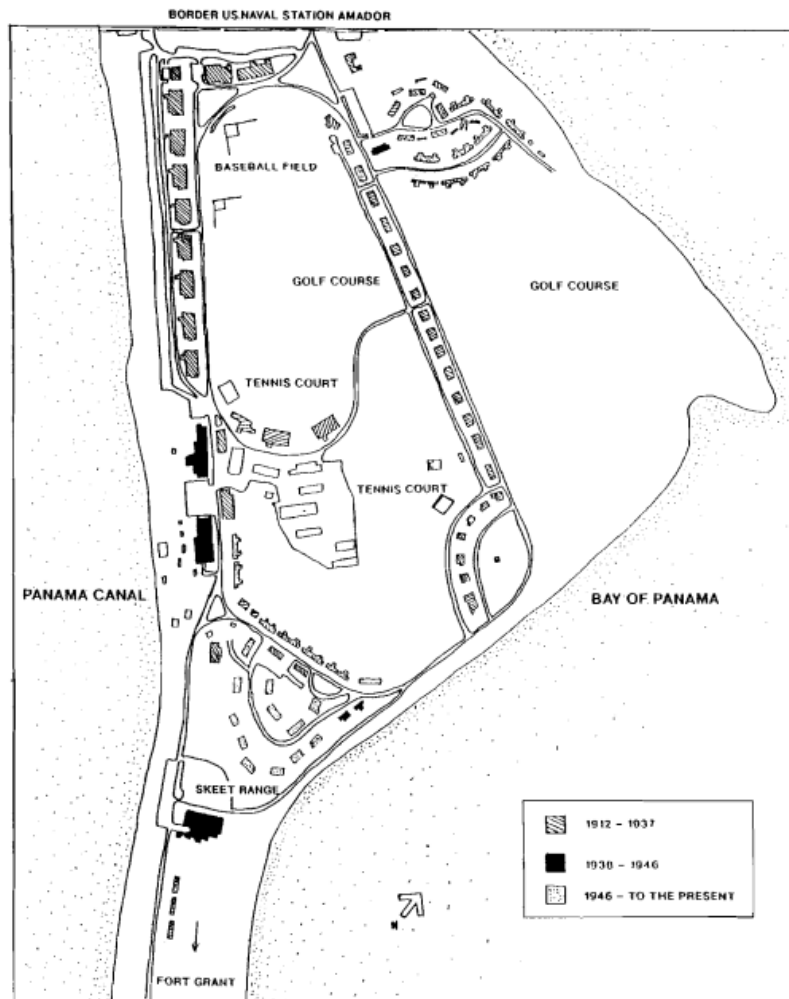
⁵³ https://arsof-history.org/arsof_in_panama/pdf/tab_c/pdf_order_of_battle_cmh.pdf

⁵⁴ <https://armyhistory.org/fort-grant-and-fort-amador-panama-canal-zone/>

⁵⁵ Ibid.

⁵⁶ https://www.jcs.mil/Portals/36/Documents/History/Monographs/Just_Cause.pdf

⁵⁷ <https://armyhistory.org/fort-grant-and-fort-amador-panama-canal-zone/>



Fort Amador

In May 1990, the Causeway was opened to the general public, initially only to pedestrian and bicycle traffic (only official vehicles were allowed).⁵⁸

Around 2002, a two-level shopping mall was built over two of the mortar batteries on Flamenco and part of Battery Warren was destroyed for a hotel that was never built

In 1999, a major development project was proposed, but was only completed in 2017, after \$72 million being spent. The Causeway was widened, with a four-lane highway, plus pedestrian and cycle paths on both sides. Marinas were expanded and modernised.

The marina at Flamenco grew, with many expensive boats and the supporting infrastructure, as well as serving as the departure point for fast ferries to Taboga and other islands. Nearby there is now a large cruise terminal, called *Fuerte Amador*, announced in 2016 and used from late 2023 (although formally opened the next year),⁵⁹ on the north-east side of Perico – this being part of another \$165 million project.⁶⁰

⁵⁸ <https://pcmc.domains.uflib.ufl.edu/2023/11/>

⁵⁹ <https://panacrypto.com/the-launch-of-panamas-new-cruise-terminal/>

⁶⁰ See <https://visitcanaldepanama.com/en/points-of-interest/the-amador-causeway/>

While some of the buildings survive to this day (and, in 2024, one area was being restored, with a boutique hotel, bars and restaurants, much of the development making use of pre-existing US-era buildings), most of the original military buildings of Fort Amador were demolished in 2000 to make way for a new commercial development. The Causeway would also be considerably widened and developed further – although the peak of Flamenco remained off-limits, hosting radar and other systems for the harbours and Canal. Flamenco is part of the current *Calzada de Amador* complex, which has multiple tourist attractions, as well as the Bio Museum.⁶¹



In 2024, one area of Amador was being restored, with a boutique hotel, bars and restaurants, much of the development making use of pre-existing US-era buildings (author's photo)

Across the entrance channels, the former Fort Kobbe was transferred to Panama in 1999, and became an international business park and the mixed-use residential community of Panama Pacifico⁶², and the former garrison area is now the town centre.⁶³



⁶¹ Old North American military bunkers located in the corners of the Panama Canal for tourist purposes by Eva Lisary González Pinilla (Universidad de Panamá, Departamento de Historia, Panamá): <https://orcid.org/0000-0002-1437-106X>

⁶² <https://www.panamapacifico.com/>

⁶³ <https://www.northamericanforts.com/East/cz.html> See also: https://www.kobbekids.com/HTML/history_of_fort_kobbe.htm



In recent years there has been an attempt to improve the information provided on the Amador Causeway about its history. For example, at the Biomuseo complex the above display on one of the buildings explains its former purpose and location at part of Fort Amador



Tourism display boards on the Causeway, looking towards the canal entrance and the Bridge of the Americas

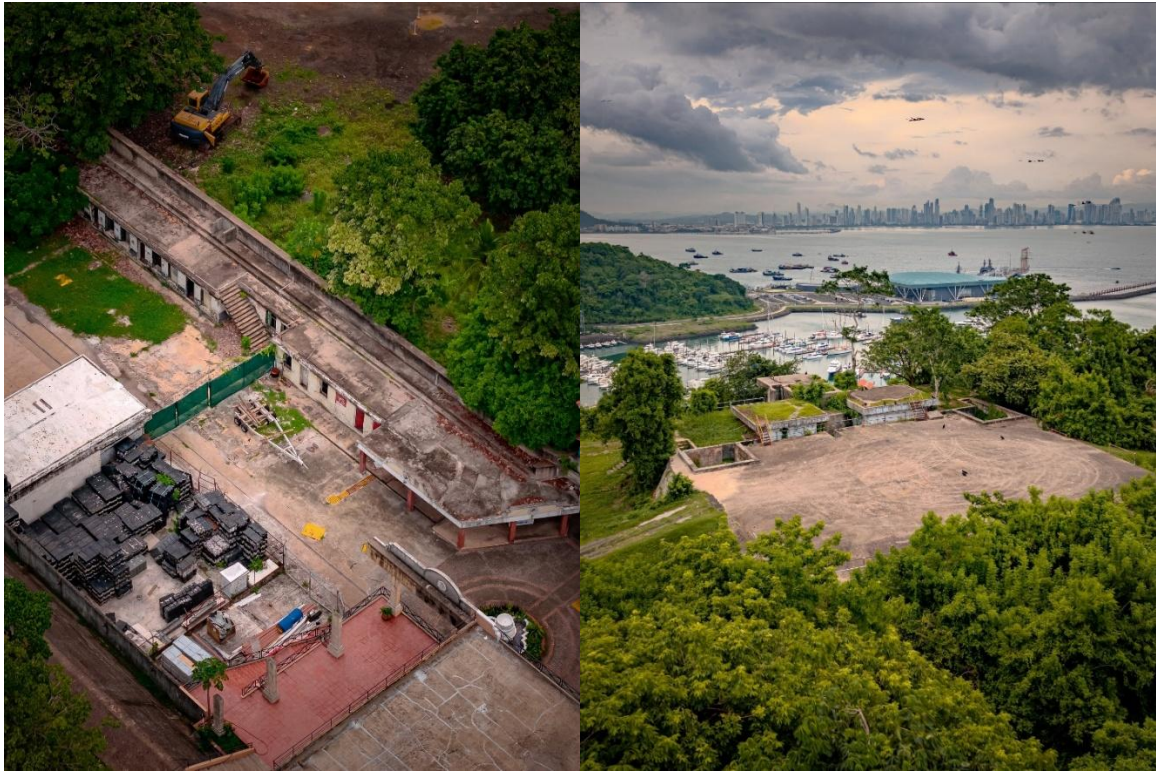




The view across the bay from the Causeway towards Punta Paitilla



Perico to the left, and Flamenco in the distance



The inaccessible areas of the former base, beyond the Flamenco marina, as they are today

Ray Todd

Panama City

Republic of Panama

30 September 2024 (updated 8 September 2026)

ADDENDA