

U.S. NAVY MAIN BASE AT
NAVAL FACILITIES ENGINEERING COMMAND,
PAN AMERICAN AIRWAYS SLIP & BOATHOUSE
Sumay Cove
Apra Harbor
Guam

HAER No. GU-6

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN ENGINEERING RECORD
National Park Service
U.S. Department of the Interior
1849 C Street NW
Washington, DC 20240-0001

HISTORIC AMERICAN ENGINEERING RECORD

U.S. NAVY MAIN BASE AT COMMANDER NAVY FORCES MARIANAS,
PAN AMERICAN AIRWAYS SLIP & BOATHOUSE

Location: Sumay Cove
Apra Harbor
Guam

Date of Construction: 1920s for the slip, 1936 for the
boathouse

Present Owner: U.S. Navy, Commander Navy Forces
Marianas

Present Use: Unused

Significance: The Pan American Airways (PAA) slip is
significant for its critical role in
the operations of the Marine Aviation
(Flight L, Fourth Squadron), the first
marine aviators to serve west of San
Francisco. This slip became the
landing area for the PAA Clipper Guam
route in the 1930s during its trans-
Pacific route. This was a pioneering
effort since no commercial aviation has
covered a major ocean.

Historians: Maria Lourdes Joy Martinez Onozawa,
Historical Architect, Micronesian Area
Research Center, 2009
Annie Griffin, Historic Preservation
Specialist, Micronesian Area Research
Center, 2009.

Project Information:

This Historic American Engineering Record (HAER) documentation
documents the physical remains of the PAA slip and boathouse at
Sumay Cove, Apra Harbor, Guam.

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(Page 2)

Research and fieldwork were conducted in November-December 2008 at the U.S. Navy Main Base; Guam Historic Preservation Office; University of Guam, Micronesian Area Research Center; and the National Park Service Office for War of the Pacific National Historical Park. A former employee of PAA, Mrs. Dora Williams, was interviewed by telephone on December 4, 2008.

HISTORIC AMERICAN ENGINEERING RECORD
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SUMAY COVE
APRA HARBOR
GUAM

INTRODUCTION

Located in the western Pacific, Guam is the largest in the Marianas chain of islands. Apra Harbor, where the U.S. Navy Main base is located, is a deep-water lagoon at the western central portion of Guam. The main operational facilities for the U.S. Navy such as the headquarters, maintenance, public works, housing and other support facilities are located in Apra Harbor.

Apra Harbor is divided into two areas: outer harbor and inner harbor. The southeast tip of Orote Peninsula and Polaris Point form the inner harbor, while Glass Breakwater and Cabras Island define the outer harbor. The PAA slip is situated in the inner harbor.

MARINE AVIATION ON GUAM

At the end of World War I, Marine Aviation successfully lobbied its retention as an independent entity and Congress authorized the construction of permanent air bases at Quantico, Parris Island and San Diego. The Fourth Squadron's Flight L, a detachment assigned at Parris Island, was deployed to Guam and arrived on March 17, 1921.¹ The Flight L marine aviators, consisting of ten pilots and ninety enlisted men, were the first to serve west of San Francisco. At the time of their arrival, an air station was being built at Orote Peninsula. Due to lack of funding, the marine aviators were put to work on completing the base. It was during this period, 1921-1922, that the slip was constructed.

The Chinese unrest in early 1927 threatened the lives of foreigners living in the major cities of China. The air

¹ Carano, Paul and Pedro C. Sanchez. 1964. *A Complete History of Guam*. Rutland, Vermont: Charles E. Tuttle Company. 230.

squadron based on Guam joined other marines from the United States to help protect American lives. On April 11, 1927 the Guam squadron left Guam and spent a year and a half patrolling the coastal sections of China.² There were no aviation activities in Apra Harbor during the absence of the Flight L marine aviators. On September 23, 1928, Patrol Squadron 3-M arrived and the air station was revived.³

Construction of additional facilities to accommodate the growing population of military personnel in Apra Harbor was carried out (Figure 2). Improvements on the slip for the marine aviation seaplanes continued for a few years until it measured 900 feet long and 180 feet wide when completed. This was the dimension of the slip upon the arrival of the PAA construction crew in 1935. Stone walls formed both sides of the slip.

The presence of the Marine Aviation on Guam was short. After ten years, the marine aviators left the island on February 24, 1931 and the air station was closed.⁴

PAN AMERICAN AIRWAYS TRANS-PACIFIC SERVICE

Juan Trippe, the president of PAA was a man of vision. After winning the contract to provide mail service delivery for the U.S. Postal Office, he envisioned PAA delivering mail and passengers throughout the globe. In the 1930s, Trippe embarked on an ambitious plan to expand into the Pacific. Trippe chose the flying boats to use on these flights and sponsored their development.⁵ For flying over great stretches of water, the flying boat was chosen over a landplane due to the lack of suitable landing strips and its ability to alight on water during an emergency. It also happened that the cities that Trippe wanted to access in the trans-Pacific route were all located along the coast.

² Ibid., 232.

³ Ibid.

⁴ Ibid.

⁵ Davies, R. E. G. 1987. *Pan Am: An Airline and Its Aircraft*. New York: Orion Books. 28

**Planning for the Trans-Pacific Air Route: San Francisco,
Honolulu, Midway, Wake, Guam, Manila and Hongkong**

Trippe's ultimate goal was to reach China. As technical adviser, Charles Lindbergh, accompanied by his wife Anne, embarked on a survey flight to the Orient aboard a Lockheed Sirius. The Lindberghs' route to Nanking, China started from New York via Canada, Alaska, Soviet Union and Japan. After this successful survey flight, PAA proceeded to purchase two local airlines in Alaska and also negotiated on a controlling interest of an airline in China, the China National Aviation Corporation.⁶

The Soviet government, however, refused to grant permission so the route through eastern Siberia was dropped. Trippe, however, was not discouraged and examined other possible solutions. One possible route was via Hawaii. There were two challenges to overcome: (1) the development of an aircraft capable of flying the long segment between San Francisco and Honolulu and (2) the absence of flying boat bases between Hawaii and Manila.

PAA found these challenges not insurmountable. It leased a 15,000-ton steamer *S. S. North Haven* and, loaded with sufficient material to construct six air bases and two settlements as well as forty-four airline technicians and seventy-four construction crew, it left San Francisco in April 1935.⁷ In four months, *S. S. North Haven* accomplished its mission. PAA commissioned the development of three Martin M-130s for the trans-Pacific route.

S. S. North Haven in Guam

The abandoned air station facilities were repaired for the use of PAA operations so no new construction was carried out. William Stephen Grooch, leader of the *S. S. North Haven* Expedition, noted that the marine aviation slip was too narrow for the flying boats. Grooch described the situation and the solution as follows:

The slip leading to the seaplane ramp in front of the Sumay hangar was very narrow for our big planes. The slip was a

⁶ Ibid., 31.

⁷ Grooch, William Stephen. 1936. *Skyway to Asia*. New York: Longmans, Green and Co. 19.

*hundred and eighty feet wide and nine hundred feet long with stone walls on either side. As our planes were one hundred and thirty feet in span it was clear that they could only be led into the narrow slip safely in quiet weather. But this slip was the only protected location in the harbor and we had to be able to use it regardless of water conditions. So we made plans to install a guide-rail trolley on each wall. The plane would taxi or be towed into the slip, then carefully centered and secured by lines to the trolleys. Then the whole assembly could be safely moved through the slip.*⁸

In 1936, S. S. *North Haven* made another trip to Guam. The steamer arrived in March that year with supplies to build a small hotel in preparation for the arrival of PAA passengers.

The PAA Clipper Service on Guam

Less than a year after the completion of the bases for the trans-Pacific route, PAA sent a modified Sikorsky S-42 to perform the arduous survey flights across a vast ocean and the inter-island segments. It flew to Honolulu from San Francisco on April 16, 1935 and returned on April 22. On June 12, it surveyed the Honolulu-Midway segment and on August 9, it performed the same mission on the Midway-Wake segment. The Sikorsky S-42 landed in Apra Harbor on October 13, 1935. On the same day that the S-42 arrived in San Francisco on October 24, 1935, PAA was awarded the trans-Pacific airmail contract.⁹

The inauguration of PAA's trans-Pacific route from November 22 to November 29, 1935 was one of the most celebrated and noteworthy events in the history of air transport.¹⁰ It was an airmail service provided by a brand new M-130. It left San Francisco on November 22 and arrived in Guam (after stopovers in Honolulu, Midway Island and Wake Island) on November 27, 1935.¹¹ The M-130 covered a total distance of 8,210 miles and a total flying time of fifty-nine hours and forty-eight minutes.

⁸ Ibid., 131.

⁹ Davies. 1987. *Pan Am: An Airline and Its Aircraft*. 36.

¹⁰ The U.S. Postal Service later issued a twenty-five cent stamp commemorating this historic event.

¹¹ One day was lost after crossing the international date line.

Thereafter, a weekly schedule of airmail from the United States arrived in Guam.

The arrival of the first passenger flight in Guam occurred on October 14, 1936. The passengers were prominent representatives of the press who were traveling as guests of PAA. It was followed twelve days later by the first paid passenger flight. This marked the beginning of regular service between Guam, the U.S. mainland and the other segments of the trans-Pacific route. The first Chamorro passengers, two women on a trip to attend a religious conference, flew to Manila in February 1937.¹²

In addition to the hotel, PAA constructed other support facilities. A boathouse was constructed at the southeast end of the slip, over two existing piers built by the marine aviators. The boats that went out to pick up the PAA Clipper passengers were tied up at the boathouse.¹³ It was only a short walking distance for the passengers to a small building, which was one of the marine aviator facilities. It was repaired and retrofitted into a passenger terminal. The terminal building where the incoming and outgoing passengers were processed was located about one hundred feet west of the boathouse.

The significance of the air transport in and out of Guam was noted by then Governor James T. Alexander in his *Annual Report* for 1938:

The advent of the transpacific airways service has made itself felt in the affairs of the Island. The postal receipts have trebled in the past year. The people themselves occasionally travel by air. Many Americans prominent in letters, business, national and international affairs, in passing through, take a keen interest in Guam and, in turn, leave their impressions and modern ideas with those who live here. The condition of the people, their mode of life, the effectiveness of government and the affairs of the Island are constantly being viewed at first hand by air travellers in positions of authority or in positions to mold public opinion here and abroad. Air

¹² Carano and Sanchez. 1964. *A Complete History of Guam*. 248.

¹³ Lauter-Reinman, Gloria. 1997. *Management Plan for World War II Resources at Navy Installations in Guam*. Honolulu, Hawaii: Ogden Environmental and Energy Services Co., Inc. 94.

*transportation may be said to have removed the most remote of the U.S. Island possessions from behind a vast sea barrier, placing Guam and its interests within 48 flying hours of California's shores.*¹⁴

Mrs. Dora Williams, a Guam resident and was a PAA employee for sixteen years, fondly remembers the arrival of the Clipper service at Sumay. When she was a child, her family lived near Apra Harbor and they could hear when the Clipper came. Her father would take her and her siblings on their dory to meet the Clipper. Mrs. Williams was so happy when the flight stewards (all males back then) would throw apples or oranges at them. It made such an impact on her that she eventually became one of the early PAA employees when PAA resumed its commercial flights into Guam after the war, with jets landing at the former U.S. Naval Air Station Agana.

The three PAA Clippers all suffered fatal ends. Two years after starting the passenger service in 1936, the *Hawaii Clipper* disappeared during a flight between Guam and Manila. The *Philippine Clipper* and *China Clipper* were used during World War II (WWII). The former crashed in California in 1943 while the latter sank at the close of WWII in Port of Spain, Trinidad.¹⁵

THE PAA CLIPPER SLIP DURING WWII, POST-WWII AND THE PRESENT

The Japanese attack on Apra Harbor and the town of Sumay in the morning of December 8, 1941 targeted the Marine Barracks, the PAA facilities and naval installations along the harbor. The PAA hotel, parts of the Marine Barracks and the cable station were severely damaged.¹⁶

Intensive and fierce air attack as well as coordinated land-based assault by the U.S. military in late July 1944 through early August 1944 ended the Japanese occupation.¹⁷ Aerial photographs taken just after the attacks show extensive damage to and destruction of facilities. The former PAA hotel and the

¹⁴ Governor of Guam. 1938. *Annual Report*. 2.

¹⁵ Davies. 1987. *Pan Am: An Airline and Its Aircraft*. 39.

¹⁶ Carano and Sanchez. 1964. *A Complete History of Guam*. 269.

¹⁷ *Ibid.*, 290-308.

town of Sumay including the church, school and residences, were completely destroyed.

After an absence of thirteen years, the U.S. Marines returned once again to Apra Harbor. Major General Henry L. Larsen, put in charge of the island, was also responsible for completing work on airfields, highways and improvements on the harbor (Figure 1). Larsen put to work nine battalions of Seabees, one marine special engineer battalion, and four battalions of army aviation engineers. These construction battalions worked steadily, day and night, and developed the facilities at Apra Harbor to allow medium-sized cargo ships to unload supplies and equipment.¹⁸ It was during this period that the PAA Clipper slip was improved (Figure 2). The eastern side was filled and expanded, while the stone wall was reinforced with steel sheet piling.¹⁹ The width of the channel remained the same.

Five large air bases and eight airstrips were in operation on the island by 1945. Seaplanes were replaced by landplanes. The PAA Clipper slip and channel were re-used as landing area for boats bringing in supplies and material into land during the WWII base construction effort. Boats were berthed in two piers at the location of the PAA boathouse.

The PAA Clipper slip and piers are currently unused and show signs that they have not been in use for many years. Portions of the stone wall have crumbled and fallen into the water. Large portions of the piers have collapsed and partially submerged. The steel sheet pilings along the eastern wall and chain pulley system are rusty and in deteriorated condition. The completion of a deeper and wider harbor to the east of the PAA Clipper slip contributed to its diminished use after WWII.

¹⁸ Ibid., 308-309.

¹⁹ Lauter-Reinman, Gloria. 1998. *Management Plan for the Apra Harbor Naval Complex. Guam*. Honolulu: Ogden Environmental and Energy Services Co., Inc. 117.

U.S. NAVY MAIN BASE AT COMMANDER NAVY FORCES MARIANAS,
 PAN AMERICAN AIRWAYS SLIP & BOATHOUSE
 HAER No. GU-6
 (Page 10)

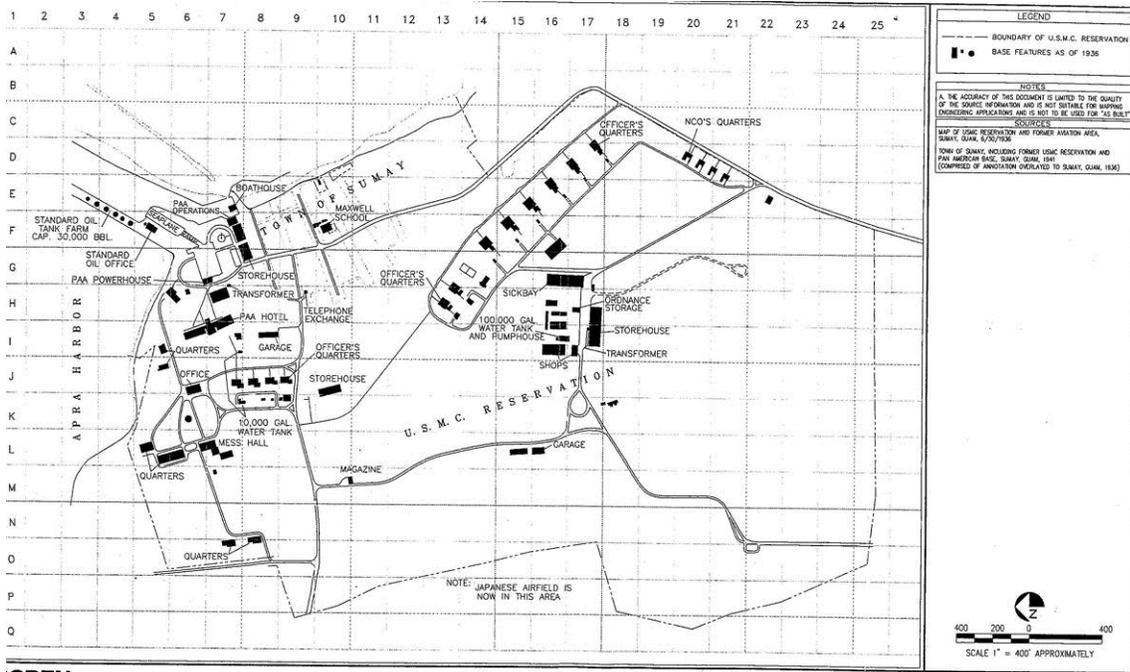
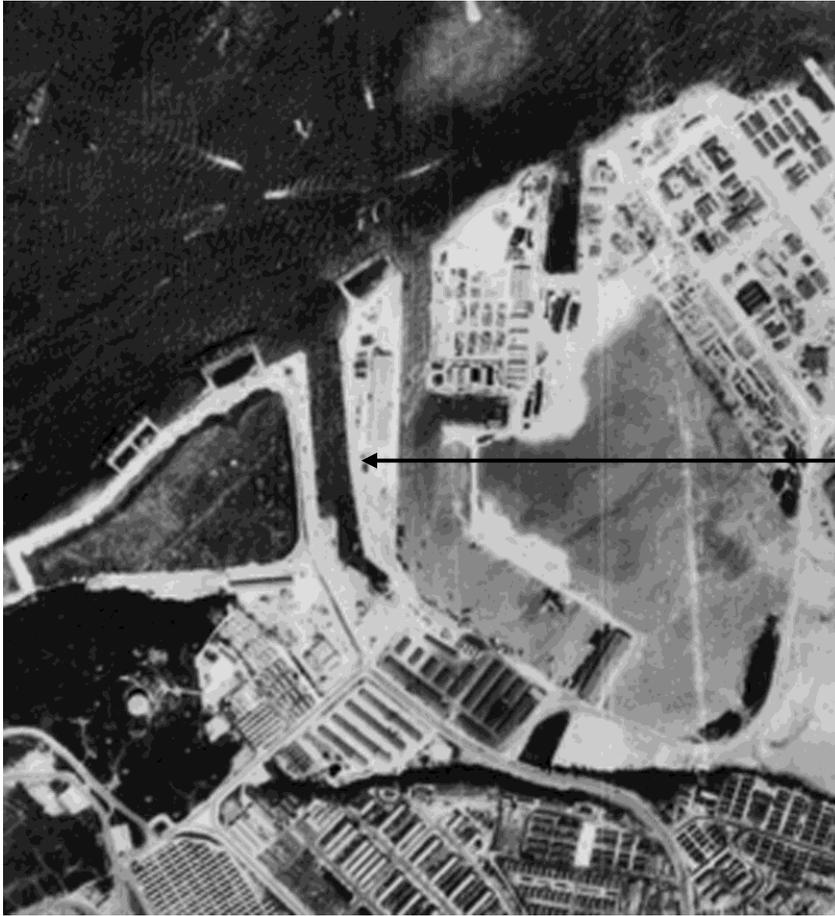


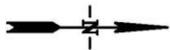
Figure 1: Composite map of the Sumay area showing PAA and US military operations between 1936 and 1941. The PAA boathouse and operations building (passenger terminal) as well as the seaplane ramp are shown in the upper left corner of the map. (Lauter-Reinman 1997, 1998)



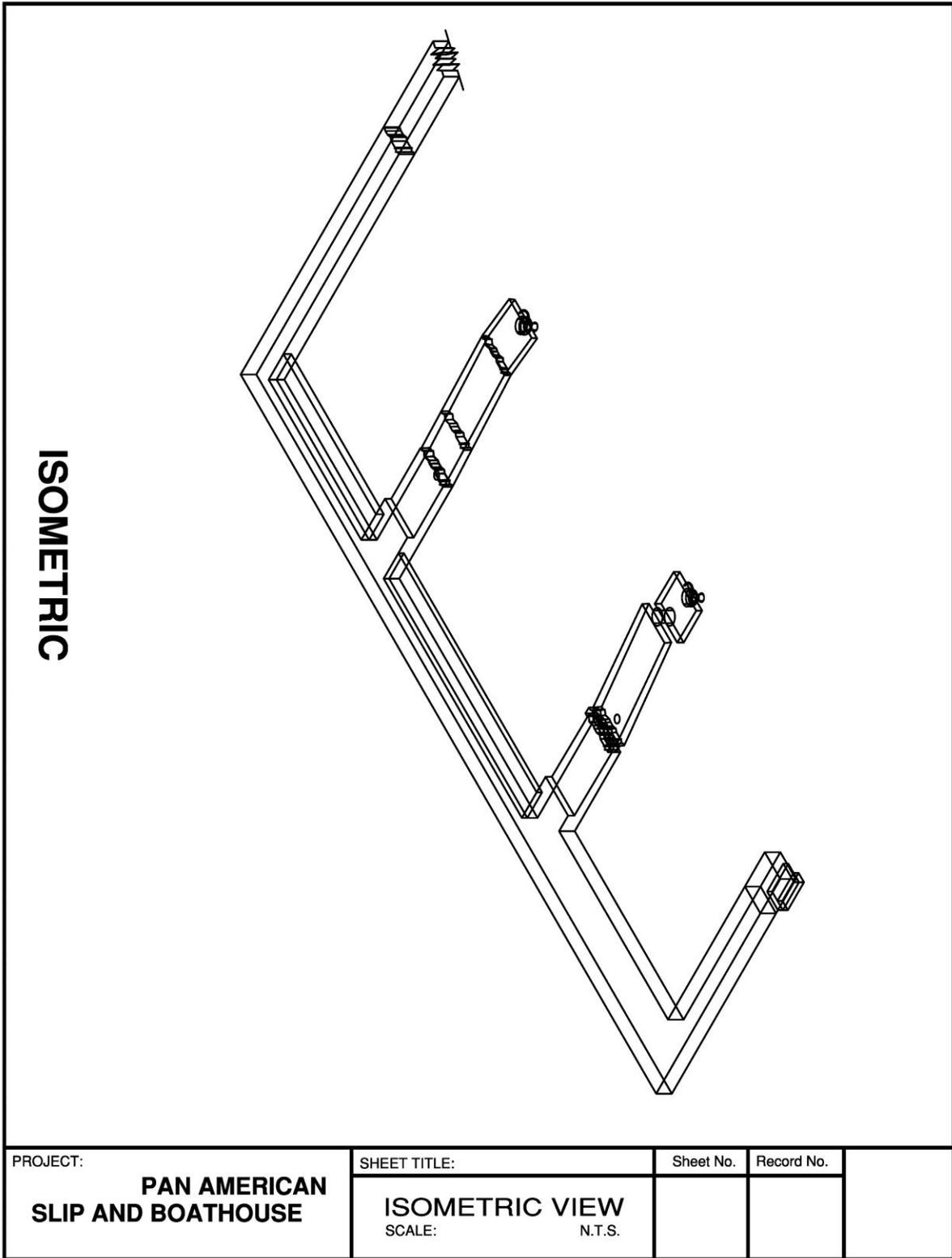
The PAA
Clipper
slip in
1946

Figure 2: Aerial view of post-WWII (February 1, 1946) Sumay showing the build up of harbor and support facilities for the former US Naval Station. Note the PAA Clipper slip was rebuilt, filled and expanded on both sides, especially on the eastern side. Photograph courtesy of Micronesian Area Research Center (MARC), Photograph Collection. No copyright restrictions of this photo obtained from MARC.

SITE PLAN

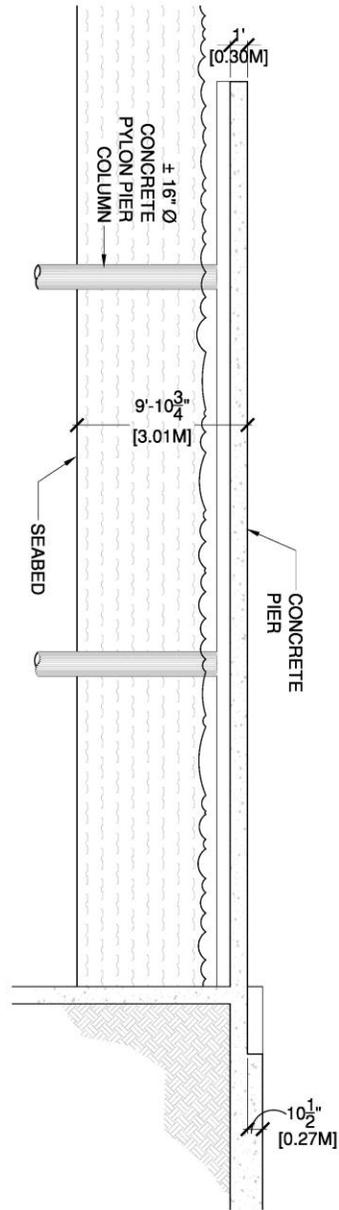


PROJECT: PAN AMERICAN SLIP AND BOATHOUSE	SHEET TITLE: SITE MAP SCALE: N.T.S.	Sheet No.	Record No.
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ENLARGE PLAN/SECTION

ELEVATION



PROJECT: PAN AMERICAN SLIP AND BOATHOUSE	SHEET TITLE:	Sheet No.	Record No.
	ELEVATION SCALE: 1/4" : 1'-0"		

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