

## SOURCE:

# Pacific Missile Range Facility (PMRF) Cultural Landscape Report Final *August 2011*

## Chapter 3 Historic Context

### Introduction

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To the extent that it is relevant to archaeological and historical investigations at PMRF, the cultural and historical setting is reviewed as six topics: (1) traditional cultural geography; (2) traditional land use; (3) early historic land use; (4) commercial agriculture era; (5) early twentieth century prior to World War II, and (6) World War II and Cold War to 1990s.

**WHAT FOLLOWS IS THE ORIGINAL “EARLY TWENTIETH CENTURY PRIOR TO WORLD WAR II”:  
SUBSECTION ‘BARKING SANDS PREPARES FOR WAR, 1939-1941’**

### ***Barking Sands Prepares for War, 1939–1941***

The eruption of World War II in 1939 brought a significant increase in development of landing fields and airports in Hawai‘i, including Barking Sands Landing Field. The US military, long a developer of aviation sites in the islands, became a major advocate of further development and expansion in the late 1930s and early 1940s. In the three years before the Japanese attack on Pearl Harbor (1939–1941), the US Army was especially involved and used its own departmental funds on projects as well as funds and resources from other federal entities, including the Works Progress Administration (WPA), the Federal Emergency Relief Administration (FERA), and the Civil Aeronautics Administration (CAA) (Murphy 1955; State of Hawaii 2005–2011).

In the decade before World War II, the territorial government and, to a lesser extent, the military used WPA funds from the federal government to improve essential infrastructure, landing fields, and airports. Hoolehua Landing Field, located on the island of Moloka‘i, was the subject of intermittent development between 1927 and 1942, including work done by the WPA after 1933. The WPA also sponsored expansions at Hilo Airport (on the island of Hawai‘i) between 1937 and 1941. At Suiter Field (Upolu Point, island of Hawai‘i), WPA and FERA funding allowed the Hawaiian government to maintain the nonmilitary portions of the airport from the mid-1930s until 1939. In 1937, Port Allen (Kaua‘i) was

cleared, graded, and paved with WPA funds and, on Maui, Puunene Field (opened in 1939) received WPA funding. Funding from the CAA was assigned in 1940 and 1941, often in tandem with WPA funding (State of Hawaii 2005–2011).

In the Territory of Hawaii, as in all parts of the United States, the WPA assigned its funding and labor resources to defense projects in the mid- to late 1930s and early 1940s. The Federal Emergency Relief Appropriation Act of 1935 and subsequent appropriation acts, while prohibiting the use of WPA funds for munitions, warships, or instruments of war, did allow funds to be used in the construction and improvement of buildings, airports, and other types of construction and non-construction work on military or naval reservations, posts, forts, camps, or fortified areas (WPA 1940). As of June 1940, all defense-related WPA work in Hawai'i was run by the WPA rather than other federal agencies (including the various branches of the military). Nearly 1,000 workers had been involved in these defense projects. Approximately 700 more were employed in non-defense projects (WPA 1940).

The USAAC, like other branches of the US military, greatly expanded during World War II. In January 1939, the US Congress, at the behest of President Franklin D. Roosevelt, passed legislation that vowed to triple the size of the Air Corps in terms of planes, officers, and enlisted men. As events abroad continued to suggest eventual American involvement in the war, expansion goals often were redefined to allow for an even larger force. Although the Air Corps expanded between 1939 and the Pearl Harbor attack, this growth was “a race against time in a desperate effort to overtake Axis air forces which had long been on a war basis” (Craven and Cate 1948:105).

At the Air Corps installations that were mushrooming across the nation, there often were great differences in physical appearance from one base to the next. While the Air Corps would have preferred to have bases built before they were manned, time and funding did not always allow it. Military planners had to make a decision between permanent or temporary structures when laying out a base (Craven and Cate 1948). Well-funded projects called for permanent structures of concrete and brick. Poorly funded projects began with temporary structures such as tents, hotels, warehouses, and leased buildings. At some bases, the disparity could be seen within the boundaries of the installation. At Kelly Field in San Antonio, Texas, for example, the living quarters varied from modern duplexes to a tent city. In the atmosphere of a looming war, progress was of principal importance, to the point that some airbases were assigned personnel before essential facilities were completed. “In such a case, training might be conducted under canvas with construction proceeding on all sides, the instructor in his lecture competing with the noise of hammers and concrete mixers as well as of the ubiquitous trainer ‘buzzing’ the field” (Craven and Cate 1948:113). “Flying would begin with the completion of a single runway. Thereafter heavy construction equipment became a hazard to flying” (Craven and Cate 1948:113).

With the main focus being the extension of its lines of defense against the European Axis, the American military devoted comparatively less effort to the reinforcement and development of Pacific defenses in the years leading up to Pearl Harbor. The Hawaiian Islands, and the Navy base at Pearl Harbor in particular, were crucial to the United States' Pacific defenses. Army Air units in the Territory of Hawaii had been primarily concerned with protecting this base as well as other installations on Oahu. Influenced by an evolving doctrine of air warfare that subordinated local air defense to long-range counter-air activities such as bombing raids, the Air Corps ventured to expand in the Pacific, as it had done in the Atlantic, the geographic extent of its bases (Craven and Cate 1948).

The expansion of the Air Corps required new installations as much as it did new personnel and aircraft. New airfields were needed for training programs, new depots were needed to maintain and supply the

growing number of planes, and new bases were needed for the tactical units for national defense. Rather than build new facilities, in many cases the Air Corps made arrangements to take over or share commercial and municipal airport facilities (Craven and Cate 1948). In the first half of 1940, the Army requested that the Territory of Hawaii set aside the 550-acre Mana Airport (present-day Barking Sands) for military use (**Figures 3.14 and 3.15**). Other airports on the islands were set aside for military use: Maui Airport in Maui for Army use; Upolu Airport on Hawai'i for Army use; Hilo Airport on Hawai'i for Army use, and Molokai Airport on Moloka'i for Navy use (Territory of Hawaii 1940b). Territorial Governor Charles Hite honored the military's request for these sites with an Executive Order (State of Hawaii 2005–2011).

The USAAC activated Barking Sands in June 1940 (Mueller 1989). In August 1940, the National Guard and Reserve were called into active duty (Craven and Cate 1948). In November 1940, the War Department authorized the construction of housing for 750 men of the 299<sup>th</sup> Infantry Regiment (Hawaiian National Guard) at Barking Sands. The new construction would include barracks, a mess hall, and warehouses as well as necessary water and power supply lines (Ashman 2004; Klass ca. 1970).

The first step in the development of the Barking Sands area into a base for bombing planes was taken yesterday when Walter F. Sanborn, director for the WPA on Kauai, returned from Honolulu with authorization to begin construction work. The first portion of the project will be the construction of housing facilities for 750 men. . . . This will include mess halls, barracks, a theater, storage and warehouse facilities, a complete power plant, and a water system. . . . Army officials have made quite a study of the Barking Sands area in connection with its development as a base for bombing planes. The area near Barking Sands offers the long runways needed for takeoffs and landings for this type of plane. The approval of the first allotments indicate that efforts will be made to develop the field as rapidly as possible as a base for planes. . . . No details in connecting with the actual development of an airdrome [airport] at Barking Sands have been released (*The Garden Island*, 5 November 1940).

Company I of the 299<sup>th</sup> Infantry Regiment (Hawaiian Army National Guard) began utilizing Barking Sands sometime in December 1940 (Cook 1995). In March 1941, an improved road, possibly a National Guard project, was completed from the inland town of Hanapepe (Port Allen/Burns Field) to the Barking Sands area (Ashman 2004). The 100 members of Company I began building five barracks at Barking Sands in April 1941 under the command of Lieutenant Francis M. F. Ching. They also built a theater and a cafeteria (Ashman 2004; Hawaii Nikkei History Editorial Board 1998). Also involved in these pre-Pearl Harbor construction projects were the USACE and the WPA (Murphy 1955). The Army purchased additional acreage to the north and south of the original field in June 1941, bringing the total land area to 2,058 acres (State of Hawaii 2005–2011) (**Figure 3.16**). From June 1941 until the attack on Pearl Harbor in December 1941, Hawaiian Airlines and Pan American Airlines occasionally used the landing strip, which was not paved, for commercial flights (State of Hawaii 2005–2011). The 299<sup>th</sup> was sent elsewhere by December 1941 (Cook 1995) (**Figures 3.17 and 3.18**).



Figure 3.14. Photograph of Mana Airport (also known as Barking Sands Landing Field), looking south, 1935. Courtesy of the National Archives and Records Administration.

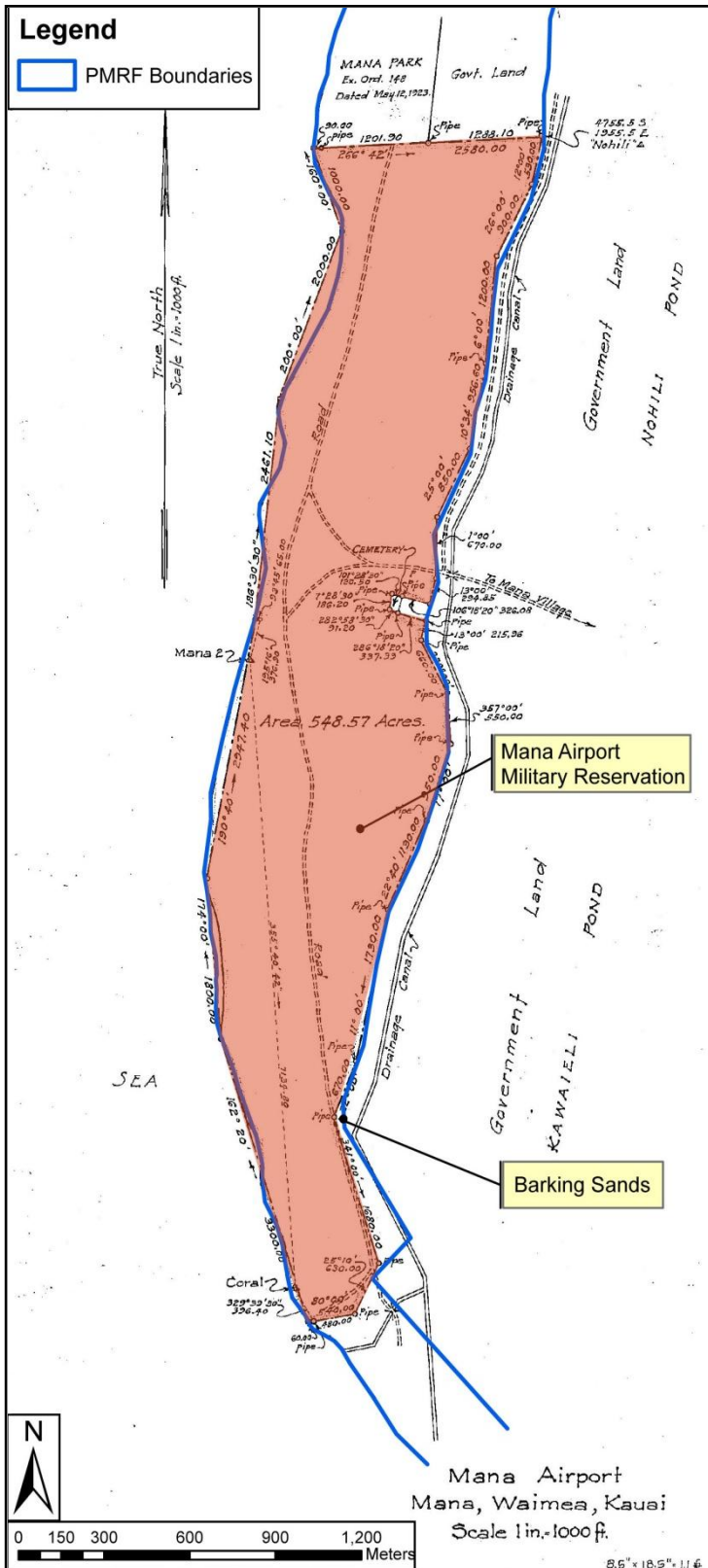


Figure 3.15. A 1940 Territory of Hawaii land survey map showing the land acquired for construction of Mana Airport (Territory of Hawaii 1940a).

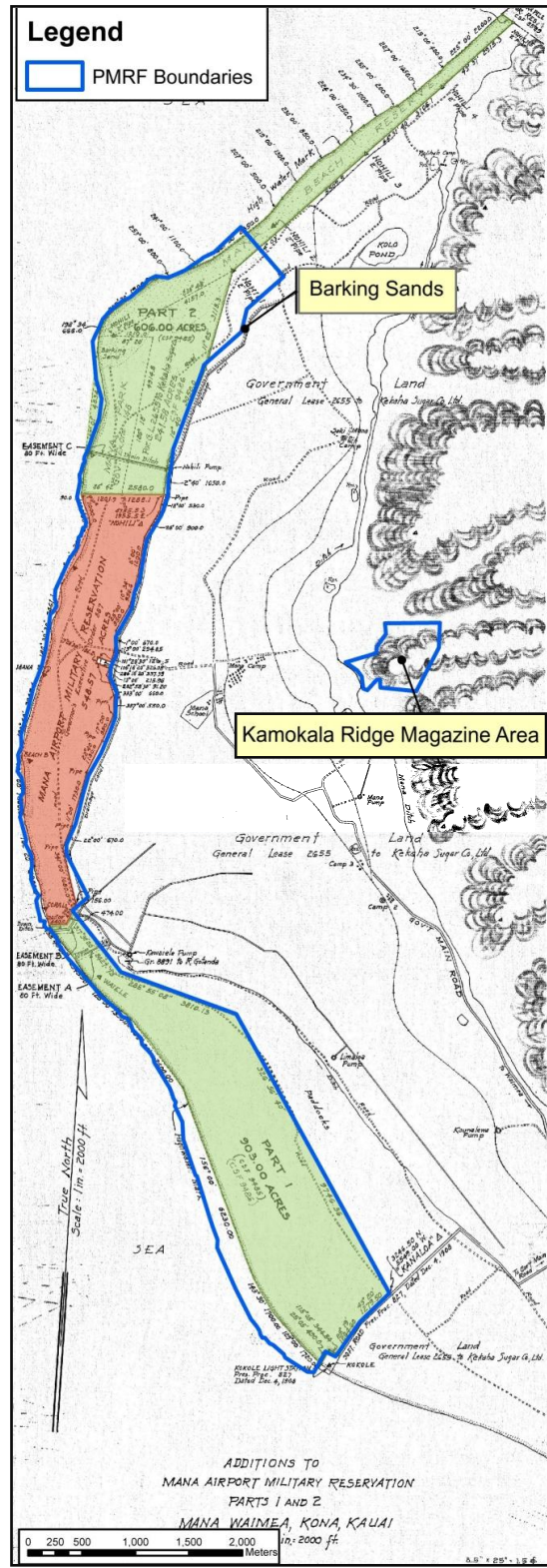


Figure 3.16. A 1941 Territory of Hawaii land survey map showing the two parcels of land (Part 1 and Part 2) acquired for expansion of Mana Airport (Territory of Hawaii 1941).



**Figure 3.17. Aerial photograph of what would become Barking Sands Army Air Base, looking north, September 1941. Courtesy of the State of Hawaii, Department of Transportation.**



**Figure 3.18. Aerial photograph of what would become Barking Sands Army Air Base, September 1941. Courtesy of the State of Hawaii, Department of Transportation.**

Hawai'i was a "major cause of concern" in national defense by early 1941 (Dod 1966:48). Lieutenant General Walter C. Short, Commanding General of the Hawai'i Department of the USACE as of February, wanted to strengthen defenses in the islands by improving harbor and anti-aircraft defenses, building bombproof installations, camouflaging important military areas, building more roads and trails, and constructing more airfields. Short believed that airfields, though expensive to build or improve, were essential to the defense of the islands. Congress, however, authorized no funds for airfields other than Hickam in early 1941. Short's attempt to develop fields with WPA labor had proved difficult, for in June 1941 WPA laborers were not in abundance. Furthermore, Army troops who might be used for the work were not in abundance in the islands. Despite these obstacles, Short and the newly created US Army Air Forces nevertheless proceeded with plans to develop airfields in the islands.

Although the USACE was asking the Department of the Army in Washington for more money to develop airfields in Hawai'i, it was able to obtain WPA funds in June 1941 to "enlarge" Barking Sands (Dod 1966). It also performed work at Morse Field on Hawai'i at this time (Dod 1966:39). Exactly when the money was used at Barking Sands or what work was performed is not known, but the WPA work here certainly was not unique to the islands. By the end of June 1941, the Territory of Hawaii had the largest proportion (80 percent) of WPA workers involved in defense work (WPA 1941). WPA work in Hawaii continued through the summer of 1942 (WPA 1942).

The status of American air defenses in Hawai'i in 1941 was "relatively imposing" if somewhat neglected in favor of bases in the North Atlantic and the Caribbean (Craven and Cate 1948:170). Between 1935 and 1939, the War Department favored the Hawaiian Islands above other overseas installation in terms of troops and munitions. Previously a part of the Army's Hawaiian Department, the Hawaiian Air Force was organized under the Air Corps in the late 1930s and was activated on 1 November 1940. Throughout the islands, there were 754 officers, 6,706 enlisted men, and 231 aircraft in the Hawaiian Air Force. The primary Air Corps stations at the time of Pearl Harbor were concentrated on Oahu at Wheeler Field, at Hickam Field (and nearby Bellows Field), and at a training squadron at Haleiwa (on northern Oahu). Emergency and auxiliary fields had been established on the outlying Hawaiian Islands. These included Lāna'i, Hawai'i, Maui, Moloka'i, and, specifically, Barking Sands on Kaua'i (Craven and Cate 1948).

By the spring of 1941, the importance of defending Hawai'i, together with the ever increasing threat of war, was evident in the US Army Air Forces' (USAAF) transfer of more heavy-bomber aircraft to the Hawaiian Air Force than any other overseas garrison. In August, the Hawaiian Air Force released a plan for the defense of Oahu. A carrier attack was believed to be the most likely form of attack by the enemy. Exhaustive air reconnaissance would locate any impending attack force long before it reached Oahu and that force would be bombed with long-range striking planes (B-17s). In the months after this plan was made, the War Department came to view reinforcement of the Philippines as a vital necessity, and the immediate defense of the Hawaiian Islands received less attention (Craven and Cate 1948).