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**Chapter 3
Historic Context**

Introduction

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: ‘DEVELOPMENT OF AIRFIELDS IN HAWAII AND THE ESTABLISHMENT OF BARKING SANDS LANDING FIELD, 1914-1939

Development of Airfields in Hawai‘i and the Establishment of Barking Sands Landing Field, 1914–1939

Set aside for use as a territorial airport by the Territory of Hawaii in 1921, Barking Sands Landing Field (as it was originally named) was one of numerous landing fields in the Hawaiian Islands in the first half of the twentieth century (Hawaii Territory Survey 1921b) (see **Figure 3.10**). These fields were established and maintained by the US military, the government of the Territory of Hawaii, and commercial airlines in the 1910s, 1920s, and 1930s. Many of these landing fields began as austere, cleared strips of land with few, if any, associated structures. By the time of World War II, some had evolved into proper airports that were converted to Army or Navy airbases of vital importance to war planning and operations, while others became auxiliary fields that supported larger military operations (State of Hawaii 2005–2011).

Landing fields were present in Hawai‘i before World War I. The Army and the Navy were involved in the establishment of landing fields throughout the Hawaiian Islands beginning in the 1910s. In 1913, US Army Lieutenant Harold Geiger arrived in Honolulu with 12 enlisted men, an engine technician, and

two seaplanes to establish seaplane operations at Schofield Barracks (Oahu). The area was determined unsuitable, and operations were transferred to nearby Fort Kamehameha. This venture was abandoned within four months, but the seed of US Army aviation in Hawai'i had been sown. Three years later, the Sixth Aero Squadron of the Army Signal Corps arrived with three seaplanes at Fort Kamehameha from San Diego in an attempt to reestablish the seaplane operation. In 1918, the unit transferred to Ford Island. A year later, in 1919, the Army airfield on Ford Island was named Luke Field in honor of World War I fighting ace Frank Luke, who had been killed in action. Luke Field had 150 planes by 1919 (Dorrance 1991; Schmitt 1979; State of Hawaii 2005–2011).

In the late 1920s and in the 1930s, the Army continued to expand its aviation presence in the Hawaiian Islands. In 1923, the US Army completed work on Wheeler Field, the second airfield on the island of Oahu. In the early 1930s, the Army maintained two pursuit squadrons and an attack squadron here. The Army broke ground for a more than 2,000-acre airbase to be known as Hickam Field on Oahu in 1935. The first detachment arrived to the nearly completed base in 1937. By this date, the Army flying units at Luke Field on Ford Island had transferred to Hickam (State of Hawaii 2005–2011).

The US Army Signal Corps and the US Army Air Corps (USAAC) used the Port Allen Military Reservation on Kaua'i as a landing field in the late 1920s. Indeed, early military planners had come to view Kaua'i as a crucial location for advanced warning and early interception of enemy aircraft (Dorrance 1998). The Army shared the facility with the Territory of Hawaii in the late 1920s and passed it on to the territory in 1930. In 1933, the landing field became known as Burns Field after Second Lieutenant J. G. Burn, a deceased Army aviator. Upolu Point Landing Field (Hawai'i), established in 1927 by the US Army Air Service, also was transferred to the territory in 1930. However, the military opened new auxiliary airfields at both of these locations in 1933. Additional auxiliary airfields were opened in this year, bringing the number to five: Kaua'i (1)—Burns Field (Port Allen); Oahu (2)—Putnam Airfield (Fort Shafter) and Bellows Field (Waimanalo); Island of Hawai'i (2)—Suiter Field (Upolu Point) and Morse Field (South Point) (State of Hawaii 2005–2011) (**Table 3.2**).

The first Navy aviation unit arrived in the Hawaiian Islands in 1919, when the Pacific Air Detachment, as it was known, established a temporary station at Naval Station Pearl Harbor. Consisting of four seaplanes and four officers, the unit was under the command of Lieutenant Commander Robert D. Kirkpatrick (Melendy 1985). The Navy obtained funding to expand nearby Ford Island for its use in 1920,

Table 3.2. Territorial Airfields (or Landing Fields) of Hawai'i.

Island	Original Name (Alternative Names)	Year Established (Initial Developer)	Year Disestablished or Current Use
Oahu	Bellows Field (Waimanalo Military Reservation)	1917 (US Army)	Bellows Air Force Station
	Ewa Mooring Mast Field (Auxiliary)(Marine Corps Air Station Ewa)	1925 (US Navy)	1952
	Ford Island (Luke Field; NAS Pearl Harbor; Naval Auxiliary Landing Field Ford Island)	1918 (US Army)	Naval Base Pearl Harbor
	Haleiwa Field	1940	1946
	Hickam Field	1935 (US Army)	Hickam Air Force Base
	John Rodgers Airport	1927 (Territory of Hawaii)	Honolulu International Airport
	Kahuku Air Base	1941 (US Army)	ca. 1947
	Kaneohe Naval Air Station (Fort Kuwaaohē Military Reservation)	1918 (US Army)	Marine Corps Air Station Kaneohe Bay
	Kipapa Army Airfield (NAS Kipapa))	ca. 1942 (US Army)	ca. 1959
	Mokuleia Airfield (Camp Kawaihapai; Dillingham Field)	1922 (US Army)	Dillingham Airfield
	Putnam Airfield (Fort Shafter)	ca. 1922 (US Army)	ca. 1945
	Wheeler Field (Wheeler Army Airfield)	1922 (US Army)	Wheeler Army Air Field
Hawai'i	Hilo Airport (Waiakea Landing Field; Lyman Field; Naval Air Station Hilo)	1925 (Territory of Hawaii and Hilo Chamber of Commerce)	Hilo International Airport
	Morse Field (Ka Lae or Kau Airport; South Point; South Cape)	1928 (Territory of Hawaii)	1983
	Upolu Point Landing Field (Suiter Field)	1927 (Territory of Hawaii)	Upolu Airport
Maui	Hana Landing Field	1934 (Territory of Hawaii)	1947
	Maalaea Landing Field	1927 (Territory of Hawaii)	1938
	Puunene Landing Field	1939 (Territory of Hawaii)	1955
Lāna'i	Lanai City Landing Field	1930 (Inter-Island Airways)	Lanai Airport
Moloka'i	Kalaupapa Landing Field	1934 (Territory of Hawaii)	Kalaupapa Airport
	Molokai Landing Field	1927 (Territory of Hawaii)	Molokai Airport

Table 3.2. Territorial Airfields (or Landing Fields) of Hawai‘i.

Island	Original Name (Alternative Names)	Year Established (Initial Developer)	Year Disestablished or Current Use
Kaua‘i	Barking Sands Landing Field (Mana Airport; Barking Sands Army Air Base; Barking Sands Air Force Base; Bonham Air Force Base)	1921 (Territory of Hawaii)	PMRF Barking Sands
	Port Allen Military Reservation (Burns Field)	1928 (Territory of Hawaii)	Port Allen Airport
	Wailua	1926 (Territory of Hawaii)	1938

Source: Bennett 2011; State of Hawaii 2005–2011.

and in 1923 the Navy flying unit at Naval Station Pearl Harbor relocated to Ford Island (State of Hawaii 2005–2011). The Navy in 1935 listed the most important landing fields as Luke Field, Wheeler Field (Oahu), John Rodgers Airport (Oahu), Hilo (island of Hawai‘i), Maalaea (Maui), Hana (Maui), Lanai City (Lāna‘i), Moloka‘i (Moloka‘i), Port Allen (Kaua‘i), and Wailua (Kaua‘i). Luke Field, on Ford Island, was one of several sites that were shared with Army aviation interests; however, in 1936 the Navy acquired control of all of Ford Island (Melendy 1986; State of Hawaii 2005–2011).

Simultaneous to the military’s development of landing fields and airports in the Hawaiian Islands were territorial and commercial projects. In 1927, the governor created a distinct entity, the Territorial Aeronautical Commission (TAC), which was, among other things, charged with promoting the establishment of landing fields. Most of the islands had at least one landing field up to this time, and various aviation milestones had been reached that would promote further development of facilities in the islands. Among the many “firsts” were the first inter-island flight in February 1920, the first night flight over Oahu in the same year, and the first attempt to fly to the Hawaiian Islands from California in 1925. The territory also had sponsored the establishment of John Rodgers Airport in 1927 on Oahu (State of Hawaii 2005–2011). The airport’s namesake was the Commander of Naval Station Pearl Harbor, who had achieved fame in naval aviation for his attempt to reach Honolulu from San Francisco in a PN-9 in 1925. Rodgers and his crew ran out of gas and were forced to crash into the Pacific several hundred miles from shore. Though unsuccessful, Rodgers’ flight was pioneering (*Honolulu Star Bulletin* 1927; Riddle 2008).

During the 1920s, private planes sometimes used a pasture adjacent to the beach at Barking Sands. The TAC ordered the landing field surveyed in March 1928. Two months later, TAC gained control of the landing field through an executive order, a process it had used to acquire landing fields at other locations in the islands. The Barking Sands Landing Field was to include 550 acres and a 13,728-by-2,000-foot runway area. The TAC did not intend to establish Barking Sands as a commercial airport due to its distance (11 miles) from Waimea. However, the TAC noted its value as a stopover for transpacific flights. In the summer of 1928, brush along the landing field was partially cleared with funds from the island’s local government. In the spring of the following year, the superintendent of Public Works for Kaua‘i cleared more brush at the field. Barking Sands was one of three airports completed in 1928. The other two were Upolu and South Point, both on the island of Hawai‘i (State of Hawaii 2005–2011).

In the summer of 1928, the *Honolulu Star-Bulletin* printed a map of the Hawaiian Islands that illustrated the location of 13 landing fields in the islands: Kauaʻi (3)—Barking Sands, Port Allen, and Wailuā; Oahu (5)—Luke Field, Wheeler Field, John Rodgers Airport, Waimānalo (Bellows Field), and Kawaihoa (Haleiwa); Molokaʻi (1)—Hoolehua (Homestead Field); Hawaiʻi (3)—Hilo, Upolu Point (Suiter Field), and South Point (Morse Field); Lānaʻi (1)—Lanai City Airport. Maui lacked an official airport at the time despite several proposals. After several failed attempts, an inter-island air service that used amphibian planes was begun in 1929. The 1930s brought important advancements in Hawaiian aviation. In 1935, Amelia Earhart flew her Lockheed Vega aircraft from Wheeler Field to Oakland, California, and two years later, she returned to Hawaii from Oakland in her Lockheed Electra. Building on her pioneering flights, Pan American began to offer flights to Hawaii (State of Hawaii 2005–2011).

With the assistance of locals, Charles Kingsford-Smith, an Australian aviator, drew attention to Barking Sands in the late 1920s (**Figure 3.12**). In June 1928, just a few months after the Territory of Hawaii had acquired the landing field, Kingsford-Smith utilized the field in an event that set a record in aviation history. At the time, the airstrip, known alternatively as Mānā Airport, was in poor condition. Brush had crept back onto the landing field, holes were evident, and the runway was not marked. Smith wanted to use the airport as a stopover for a transpacific flight from the US mainland to Australia (**Figure 3.13**), the first ever attempt of such an itinerary. The aviation pioneer planned to fly in his Fokker trimotor, dubbed the *Southern Cross*, from Oakland to Brisbane via Honolulu, Barking Sands, and two stops in the Fiji Islands. Local people aided in repairing the runway. Temporarily, the landing field was called the Southern Cross after Smith's plane. Aboard with Smith at takeoff were three crewmen. The longest leg of the 31 May–9 June 1928 flight was 3,150 miles from Barking Sands to Suva, Fiji. This leg of the journey was the longest over-water flight in aviation history (*The Garden Island*, 31 May 2003 [*The Garden Island*, 5 June 1928]; Kingsford-Smith and Ulm 1928; State of Hawaii 2005–2011). The local newspaper, *The Garden Island*, described the scene at Barking Sands when Kingsford-Smith departed on 5 June 1928:

A huge crowd was on hand to see the take-off, many spending the entire night on the field, waiting for dawn. Many spectators drove into the field during the morning hours, and even after the plane had taken off some late comers were still arriving at the field. The crowd was estimated to be about two thousand when the plane got away (*The Garden Island*, 31 May 2003 [*The Garden Island*, 5 June 1928]).

