

PH0055182

**NATIONAL REGISTER OF HISTORIC PLACES
INVENTORY - NOMINATION FORM
FOR FEDERAL PROPERTIES**

(Type all entries - complete applicable sections)

STATE: Hawaii
COUNTY: Hawaii
FOR NPS USE ONLY
ENTRY DATE JUL 13 1974

1. NAME

COMMON:
Wilkes Campsite

AND/OR HISTORIC:

2. LOCATION

STREET AND NUMBER: **Summit of Mauna Loa Volcano in**

CITY OR TOWN: **Hawaii Volcanoes National Park** CONGRESSIONAL DISTRICT: **2**

STATE: **Hawaii** CODE: **15** COUNTY: **Hawaii** CODE: **01**

3. CLASSIFICATION

CATEGORY (Check One)	OWNERSHIP	STATUS	ACCESSIBLE TO THE PUBLIC
<input type="checkbox"/> District <input type="checkbox"/> Building <input checked="" type="checkbox"/> Site <input type="checkbox"/> Structure <input type="checkbox"/> Object	<input checked="" type="checkbox"/> Public <input type="checkbox"/> Private <input type="checkbox"/> Both	Public Acquisition: <input type="checkbox"/> In Process <input type="checkbox"/> Being Considered	<input type="checkbox"/> Occupied <input checked="" type="checkbox"/> Unoccupied <input type="checkbox"/> Preservation work in progress
PRESENT USE (Check One or More as Appropriate)			
<input type="checkbox"/> Agricultural <input type="checkbox"/> Commercial <input type="checkbox"/> Educational <input type="checkbox"/> Entertainment	<input checked="" type="checkbox"/> Government <input type="checkbox"/> Industrial <input type="checkbox"/> Military <input type="checkbox"/> Museum	<input checked="" type="checkbox"/> Park <input type="checkbox"/> Private Residence <input type="checkbox"/> Religious <input type="checkbox"/> Scientific	<input type="checkbox"/> Transportation <input type="checkbox"/> Other (Specify)
Yes: <input type="checkbox"/> Restricted <input checked="" type="checkbox"/> Unrestricted <input type="checkbox"/> No			

4. AGENCY

National Park Service, U.S.D.I.

REGIONAL HEADQUARTERS: (If applicable) STREET AND NUMBER:

CITY OR TOWN: **Hawaii Volcanoes National Park** STATE: **Hawaii** CODE: **1700**

5. LOCATION OF LEGAL DESCRIPTION

COURTHOUSE, REGISTRY OF DEEDS, ETC:
National Park Service, U.S.D.I.

STREET AND NUMBER:

CITY OR TOWN: **Washington** STATE: **D. C.** CODE: **08**

6. REPRESENTATION IN EXISTING SURVEYS

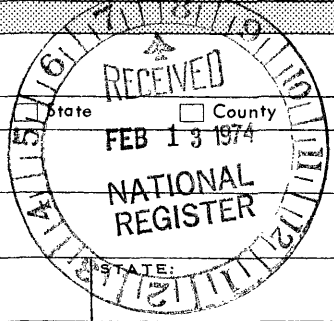
TITLE OF SURVEY:

DATE OF SURVEY: Federal State County Local

DEPOSITORY FOR SURVEY RECORDS:

STREET AND NUMBER:

CITY OR TOWN: STATE: CODE:



SEE INSTRUCTIONS

STATE: **Hawaii**

COUNTY: **Hawaii**

ENTRY NUMBER: **94974**

DATE: **JUL 13 1974**

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7. DESCRIPTION

CONDITION	(Check One)					
	<input type="checkbox"/> Excellent	<input type="checkbox"/> Good	<input type="checkbox"/> Fair	<input type="checkbox"/> Deteriorated	<input checked="" type="checkbox"/> Ruins	<input type="checkbox"/> Unexposed
	(Check One)			(Check One)		
	<input type="checkbox"/> Altered	<input checked="" type="checkbox"/> Unaltered		<input type="checkbox"/> Moved	<input checked="" type="checkbox"/> Original Site	

DESCRIBE THE PRESENT AND ORIGINAL (if known) PHYSICAL APPEARANCE

CLASSIFIED STRUCTURE

Wilkes Campsite: (No number) (Photographs ~~made~~ made ¹⁹⁷³ ~~made~~)

Order of Significance: First

Acres of Class VI Land Associated: 4 acres

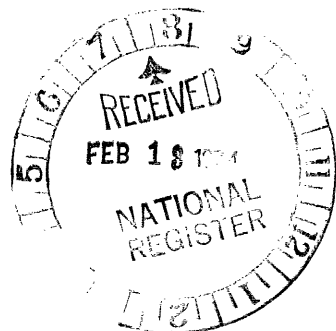
Description -- Present: An area adjacent to the east rim of the summit crater of Mauna Loa volcano, at an altitude of 13,240 feet above sea level; surface of pahoehoe lava, with piled and scattered lava boulders, with evidence of rearrangement by man.

Description -- December 1840 - January 1841: A "high stone wall" of unknown height and of mortarless construction surrounded individual structures of the camp. Each individual structure, usually a tent, was encircled with a mortarless wall as high as its eaves. The principal building was a pre-fabricated portable house, carried in pieces to the camp, assembled within the camp and which contained a pendulum for scientific experiments. There was an officers' tent, three tents for others, tents for storage, cooking and for studies of magnetism, astronomy, temperature and barometric pressure changes. The walls were necessary to shelter men and equipment from winter high winds, blizzards, and intense cold. "Pendulum Peak, January 1841/U.S. Ex. Ex." was cut into the bedrock at the campsite. Its location awaits discovery.

At abandonment in January 1841, the tents and portable house were dismantled and removed downslope. This began the deterioration of the standing walls. Subsequent earthquakes, violent storms, and some disturbances by artifact hunters and the curious contributed to the felling of the walls. The rubble of the fallen walls was probably the principal source for the rocks used in the construction of the mortared walls of the nearby summit shelter, built by the National Park Service in 1934.

Recommended Treatment: Preservation

Preliminary Estimate of Cost: \$1,000 (Archeological mapping and examination of ruins. Note: Extremely remote location at 13,240 feet above sea level. Site barren and waterless. Transportation and support by helicopter.)



SEE INSTRUCTIONS

8. SIGNIFICANCE

PERIOD (Check One or More as Appropriate)

<input type="checkbox"/> Pre-Columbian	<input type="checkbox"/> 16th Century	<input type="checkbox"/> 18th Century	<input type="checkbox"/> 20th Century
<input type="checkbox"/> 15th Century	<input type="checkbox"/> 17th Century	<input checked="" type="checkbox"/> 19th Century	

SPECIFIC DATE(S) (If Applicable and Known)

AREAS OF SIGNIFICANCE (Check One or More as Appropriate)

<input type="checkbox"/> Aboriginal	<input type="checkbox"/> Education	<input type="checkbox"/> Political	<input type="checkbox"/> Urban Planning
<input type="checkbox"/> Prehistoric	<input checked="" type="checkbox"/> Engineering	<input type="checkbox"/> Religion/Philosophy	<input type="checkbox"/> Other (Specify)
<input checked="" type="checkbox"/> Historic	<input type="checkbox"/> Industry	<input checked="" type="checkbox"/> Science	_____
<input type="checkbox"/> Agriculture	<input type="checkbox"/> Invention	<input type="checkbox"/> Sculpture	_____
<input type="checkbox"/> Architecture	<input type="checkbox"/> Landscape Architecture	<input type="checkbox"/> Social/Humanitarian	_____
<input type="checkbox"/> Art	<input type="checkbox"/> Literature	<input type="checkbox"/> Theater	_____
<input type="checkbox"/> Commerce	<input checked="" type="checkbox"/> Military	<input checked="" type="checkbox"/> Transportation	_____
<input type="checkbox"/> Communications	<input type="checkbox"/> Music		_____
<input type="checkbox"/> Conservation			_____

STATEMENT OF SIGNIFICANCE

Following a tradition set by European nations, the United States sent a scientific expedition into the vast Pacific Ocean. Lieutenant Charles Wilkes, USN, led the U. S. Exploring Expedition. Among the remote places it conducted research was on the summit of the world's highest insular peak--Mauna Loa on the Island of Hawaii. For three-and-a-half weeks in the winter of 1840-1841, American scientists survived with limited food, water, and fuel at more than 13,000 feet above sea level to conduct experiments while experiencing blizzards, freezing temperatures, and altitude sickness. Rubble of their camp walls remains.

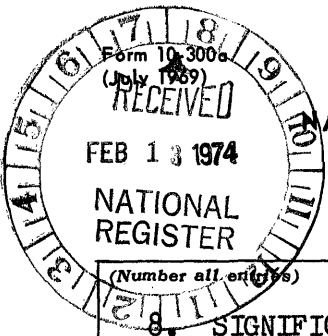
Pacific historian Donald D. Johnson has given the background, purpose, and his evaluation of the four-year United States Exploring Expedition which started in 1838.

One of the most consistently and unanimously advanced appeals of the whaling fraternity was one in which they were joined by the merchant mariners. This was the request for government-sponsored explorations and charts of the seas and coasts on which they plied their trades. Official charts of the coasts of the United States were begun very early, but extension of government surveys to the Pacific and other remote areas was slow to come

In 1828 the probability that Congress would pass full enabling legislation for the launching of the expedition seemed so strong that Jeremiah N. Reynolds, one of the most active protagonists of the plan, was sent by the Navy Department to conduct an inquiry for information concerning the Pacific among the maritime centers of New York and New England....the project was shelved,

(continued)

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however, and Reynold's report was to wait seven years before it would be fully considered and published by Congress.

The second Jackson administration did take up the proposal for an official expedition, using Reynold's own arguments, but the author was embroiled in bickering with Secretary of the Navy Dickerson to such an extent he was put aside and permitted no part in the preparation or in the expedition itself. After long delays through obstructionism, among other causes, from within the Navy Department itself, the expedition set sail on August 19, 1838, under Lieutenant Charles Wilkes....In its four-year tour of Pacific waters Wilkes' squadron explored many islands in those parts of the Pacific frequented by whalers, in many cases merely verifying reports secured by Reynolds from whalers themselves in 1828. In other instances valuable additions were made to geographic knowledge of the area, but the publication of the expedition's findings came too late to be of maximum service to whalers. (Johnson, n.d.: 100-103)

Pacific historian Gratton notes that "In the organized pursuit of knowledge of the islands to 1850," the United States expedition ranks well above the British efforts and just below that of the French expeditions of Dumont d'Urville. Gratton also notes that the U. S. expedition was "Engendered from controversy, continued throughout in controversy, and productive of controversy to the present day. Wilkes himself was a notably controversial figure,..." (Gratton 1963: 184, 186)

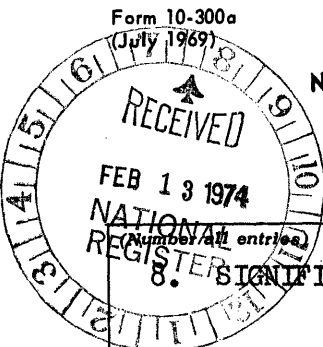
While the Wilkes expedition had no direct effect on the history of the Pacific or of the United States, its reports and graphics constitute a major source of information about Pacific islands, waters, fringing coasts, and Antarctica for the period about 1840. Works resulting from the expedition are frequently referenced by 20th-century scholars in many academic disciplines. Gratton notes that

The publications arising from and associated with the expedition are rich and voluminous--

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a bibliography of them runs to 150 pages; a well-informed British student of the Pacific has assessed the official publications as up to the standard inaugurated by Captain James Cook. (Gratton 1963: 187)

During his visit to the Hawaiian islands in the winter of 1840-1841, Wilkes showed disdain for native Hawaiians and their advice and experience concerning local terrain. His overland expedition to the summit of Mauna Loa can be said to have succeeded in spite of inept leadership. Native Hawaiians came to his rescue.

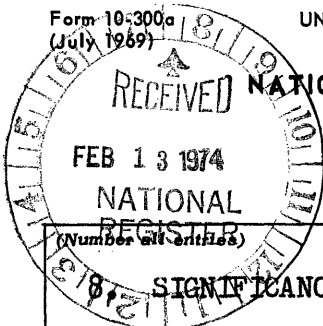
During a confused start on the beach at Hilo on December 14, 1840, the bulky and heavy supplies were left behind. The 200 porters hired by Wilkes through one chief departed inland with only the light loads. Wilkes was forced to hire, at double pay through another chief, a second group of porters to carry the bulky and heavy items. By two days' later and 30 miles inland, at about the 4,000-foot elevation and close to the summit of Kilauea volcano, Wilkes had become increasingly disenchanted with the Hawaiian people--they frustrated his sense of orderliness and naval discipline. Communication through interpreters proved difficult. Native foods displeased. The army of women and children who accompanied their working relatives feasted on expedition food and lent a party atmosphere to his official mission. The expedition was dropping behind the schedule set by Wilkes in his shipboard cabin. Expedition food was consumed at an alarming rate. Porters straggled, delayed and refused to keep up the expected pace.

The goal, the summit of Mauna Loa more than 13,000 feet above sea level, was in plain sight from the Wilkes camp at Kilauea. About 30 hiking miles had been covered; there were still more than 50 strenuous ones to climb. From the Kilauea camp, Puhano, the chief Hawaiian guide, led off for Kapapala village to start up the Ainapo trail. Wilkes refused to follow.

Prehistoric Hawaiians had laid out the Ainapo foot trail and evolved practices which assured availability of shelter, drinking fluids, and firewood between Kapapala village and Mokuaweoweo, Mauna Loa's summit crater. Kapapala village, at the 2,000-foot elevation, was reached from Kilauea, at the 4,000-foot elevation, over a comparatively easy trail. But to Wilkes at Kilauea, Kapapala was downhill and seemed not in the proper direction. Much unnecessary thirst, hunger, cold, altitude sickness, fatigue, and

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snowblindness were suffered by both Caucasians and Hawaiians of the expedition when Wilkes substituted his own route for the Hawaiian Ainapo trail.

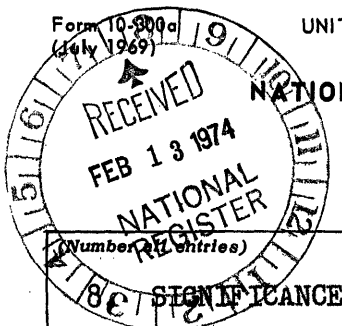
Leading a party of 300 Caucasians and Hawaiians, Wilkes took off on a trackless beeline from Kilauea toward Mauna Loa's summit, guided by a midshipman holding a compass. Intermittent lines of at least 300 people, most of them Hawaiian porters, stretched out along the new trail. On this day, most of the women, children, and nonworking Hawaiians dropped from the party. For most of the morning and early afternoon, Wilkes' line of march was through wooded country, but without streams or waterholes. Shoes of the Caucasians scuffed and soles abraded on the congealed lava underfoot. Most of the Hawaiians were barefoot. To mark the path for the straggling porters, Wilkes' associates built fires and blazed trees. Bushes were broken with their tops laid down to indicate the direction of travel. Although the Hawaiian culture was disintegrating in 1840, this treatment of sacred trees and shrubs in the taboo forests of the gods and high chiefs must have seemed to be desecration to many Hawaiians. Wilkes made one two-mile side trip to reach a known source of water in the forest. A log had been partially carved into a canoe hull, and it was usually full of rainwater. When Wilkes reached it, the log was empty. He believed that Hawaiians ahead of him had filled their calabashes before maliciously bailing out the remaining water onto the ground. By late afternoon, camp was pitched on the barren lavas at about the 6,000-foot elevation. This camp was to be known as "Sunday Station" and became the principal base camp for the Wilkes expedition. The situation was critical. Five or six gallons only of water were available for the 300 people. Native food was exhausted and Western food brought from the ship was in low supply. "Mountain" sickness, probably caused from the combination of fatigue, dehydration, chill, hunger, and the altitude, was prevalent. Fuel was scarce to make fires for warmth or cooking. Hawaiians sold water at 50 cents a quart to thirsty sailors and accepted warm clothing if cash was not available.

To the rescue came the Hawaiian guides "Ragsdale" and Keaweehu, a famous bird catcher. Both had apparently been waiting at Kapapala for the expedition to arrive and planned to guide the expedition up the Ainapo trail. Puhano arrived at Kapapala alone, and he is believed to have had no further direct association with the expedition. But Ragsdale--a nickname, his Hawaiian name is not recorded--and Keaweehu arrived at Sunday Station from Kapapala to surprise Wilkes with the information that the snow was still two days' hike away and not as close as Wilkes believed.

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Wilkes was not the first nor the last foreigner to be fooled by the vast distances on the slopes of Mauna Loa. Keaweehu also informed Wilkes that Wilkes had taken the "wrong road" and that Kapapala was the trail head and Ainapo the trail. Wilkes was then camped about ten miles east of the Ainapo trail.

Ragsdale was hired to supply water for the camp. His men delivered it the next day--fifteen gallons carried in open-top vessels over the trackless ten miles of rugged lavas which separated Wilkes' camp from the Ainapo trail. At about the same elevation on the Ainapo was a large lava tube with pools of water inside. This tube was used by Hawaiians on the Ainapo trail and was easily supplied with grass (for insulation from the cold ground) and firewood from a point on the trail not far below.

From Sunday Station on, Wilkes was reluctantly forced to make additional and expensive trail-side and mountain-top supply contracts with knowledgeable Hawaiians. Such items as the grass used to insulate the pre-fabricated laboratory assembled on top came from lower down on the Ainapo. Hawaiian contractors hauled the grass in quantity from the large supply available at the site of the Hawaiian base camp at about the 6,500-foot elevation of the Ainapo trail. Wilkes continued to utilize his trail with its attendant difficulties, while the Hawaiians utilized their trail with apparent ease to supply water and fuel to the summit. After two nights and a full day of rest and resupply at Sunday Station, Wilkes was able to establish a second camp, termed the "Recruiting Station," just below the 10,000-foot elevation. The next day, December 22, a third and smaller camp, called the "Flag Station," was set up somewhere between the 12,000- and 13,000-foot elevations. By this time, Keaweehu had steered Wilkes westward enough to join the Ainapo trail near its upper end. This brought Wilkes closer to the Hawaiian supply line. Keaweehu was with Wilkes most of the time and directed Hawaiian support activities.

By 3:00 p.m., Tuesday, December 22, 1840, with a gale from the northwest and the temperature at about 25°F., Wilkes, Keaweehu, 12 Hawaiians, 6 sailors, and a sergeant were at the site of the Flag Station. Some of the group, including a few almost naked Hawaiians, went back down since the camping gear was not sufficient for the large party of 21--9 stayed. The 12 men proceeding downhill passed many Hawaiian porters, also nearly naked, coming up and generated a general retreat. The porters abandoned their loads and joined the downhill trek toward the Recruiting Station.



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The mountain became in consequence a scene of confusion; being strewn with instruments, boxes pieces of the portable house, tents, calabashes, etc., which the natives had dropped (Wilkes 1844: IV, 149)

Wilkes, at the Flag Station, and his eight companions, some suffering from mountain sickness, headaches, and fever, built a circular wall of lava "clinkers" and covered the shelter with the canvas of a small tent. Three of the nine wandered off. When they had not returned by dusk, Wilkes manufactured a beacon from a calabash and a candle. A snow-storm was in progress. The three reached the Flag Station after dark by crawling on their hands and knees over the uneven, boulder-strewn and crack-filled lava fields. By 4:00 a.m. of December 23, the weight of the snow on the canvas roof caused it to collapse. It dumped snow on the sleeping men below. At daylight, some of the group went far enough down the trail to retrieve firewood from the gear abandoned on the trail the day before. By 11:00 a.m., the party was underway again and crossed an unusually rough field of aa lava. After a two-hour walk, the nine reached the rim of Mokuaweoweo, the summit crater. They could not find a way down its steep sides and chose the smoothest place on the rim that they could find for the summit encampment. Their tent was pitched by 4:00 p.m., within 60 feet of the crater's edge. Lava blocks secured the tent ropes. By 7:00 p.m., high winds had almost blown the tent away.

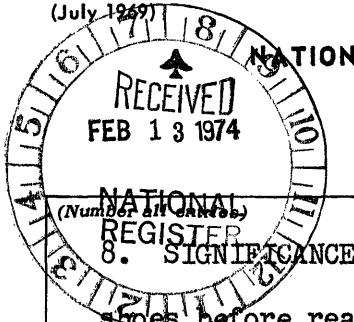
On the morning of December 24, the Americans exhausted their supply of matches trying to light a fire. The oxygen content of the atmosphere was so low at 13,200 feet above sea level that the "fire-by-friction" attempts by the Hawaiians in the party were fruitless. Smoke came from the fire groove, but the tinder would not burst into flame. Wilkes and his party went back to bed for warmth to await help from below. A fresh supply of matches arrived at 11:00 a.m., and a fire started. Further supplies trickled into the encampment site intermittently from noon on.

By December 24, naval officers at the Recruiting and Sunday Stations had rejected demands from the nearly naked Hawaiian porters for increased cash compensation. Many Hawaiians then "deserted." Within the next few days, the expedition management tried to eliminate all Hawaiians and Hawaiian foods and substitute Americans and American foods. Sailors and marines were summoned from the ships anchored in Hilo bay to carry the gear, abandoned on the trail or stockpiled at way camps, up the remaining distances to the summit. More than half of the Americans wore out their

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shoes before reaching the summit. Much time was spent mending boots and making sandals--rags wrapped many feet. Dr. Gerrit P. Judd (former American medical missionary then on the staff of His Hawaiian Majesty and assigned by Kamehameha III to the expedition as translator and liaison officer) traveled up and down between the summit and the Recruiting Station to tend the many sailors who suffered from mountain sickness. Vomiting, diarrhea, and bleeding feet were prevalent. Some of the Americans attributed their ability to work inspite of physical suffering to their "good pluck." Provisions for 60 days came from the ships with the crewmen.

Christmas Day at the summit was stormy, with snow and a gale from the southwest. Blankets and furs were worn by many men at the encampment site as they began building a high rock wall to surround the encampment site. Also, each tent was surrounded by a rock wall as high as the eaves. Walls were built without mortar, and the rocks interlocked mechanically by their natural configurations. It is probable that their "dry" masonry was an American technique learned on East Coast farms and which differed from Hawaiian dry-masonry techniques.

On December 31, 1840, men at the summit had their first day on full rations, and the pre-fabricated pendulum house was assembled. Axes and chisels cut away the rock surface to "flat" an area for the pendulum's base. The pendulum house itself was covered with hair cloth, and a tent of "No. 2" canvas erected over the covered house for additional insulation. An airspace was left between the tent and the house.

The pendulum clock was adjusted and put in motion on Sunday, January 3. On that day, Lieutenant Budd began his map of the summit area, and other observations and experiments began.

Inside the pendulum house temperature variations cast doubts on the accuracy of the equipment. On Tuesday, January 5, dry grass arrived on the backs of Hawaiian porters and was stuffed as insulation between the tent and the house. Grass also covered the cold lava floor. The grass layers resulted in a constant inside temperature, while outside the variations went from 50 down to 17 degrees. Dr. Judd improvised a fireplace and chimney inside the pendulum house to warm fingers, but the limit of three sticks of wood a day caused water to freeze within "a couple of feet of the fire when it was giving out the most heat." During a storm on January 7 through 9, wind was such that Wilkes and others were not able to hear the ticks of the pendulum. Pendulum experiments were completed

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on Monday, January 11, and Wilkes made a trip around the summit crater. From the highest point on Mauna Loa, he determined through optics that Mauna Kea volcano was 193 feet higher. (Modern methods place Mauna Kea as 104 feet higher.) Wilkes returned to camp to find about 40 "half-naked natives" had arrived to begin the return portage. Wilkes suffered from snowblindness because of his excursion, but disassembled the pendulum to make room in the pendulum house to sleep the Hawaiians overnight.

Before Wilkes left the summit encampment site on Wednesday, January 13, 1841, he permitted the words "Pendulum Peak, January 1841, U. S. Ex. Ex." to be incised in the lava surface inside the wall which surrounded the camp. The "U. S. Ex. Ex." was included at the suggestion of J. G. Clarke, a seaman. Wilkes left two officers on top to supervise the breaking down of the camp, and arrived at Sunday Station about 5:00 p.m. There he enjoyed "lomilomi," the Hawaiian massage. The next day, Wilkes and others continued on to Kilauea volcano to make observations and experiments there. On January 15, between 60 to 70 Hawaiians arrived on the summit to bring down the gear. Camp was abandoned on January 16, with the walls left standing. Hawaiians brought down the gear, while the American crewmen were at Kilauea supporting Wilkes in his work there.

The ruins of Wilkes' campsite atop Mauna Loa are the only known physical evidence in the Pacific of the U. S. Exploring Expedition.



9. MAJOR BIBLIOGRAPHICAL REFERENCES

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Honolulu Star-Bulletin. July 14, 1973. P. A-11.

Gratton, C. Hartley
 1963 The Southwest Pacific to 1900. Ann Arbor. Pp. 184, 186, 187.

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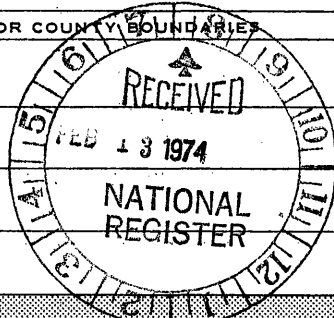
10. GEOGRAPHICAL DATA

LATITUDE AND LONGITUDE COORDINATES DEFINING A RECTANGLE LOCATING THE PROPERTY			O R	LATITUDE AND LONGITUDE COORDINATES DEFINING THE CENTER POINT OF A PROPERTY OF LESS THAN TEN ACRES		
CORNER	LATITUDE	LONGITUDE		LATITUDE	LONGITUDE	
	Degrees Minutes Seconds	Degrees Minutes Seconds		Degrees Minutes Seconds	Degrees Minutes Seconds	
NW	° ' "	° ' "		19° 28' 11"	155° 35' 05"	
NE	° ' "	° ' "				
SE	° ' "	° ' "				
SW	° ' "	° ' "				

APPROXIMATE ACREAGE OF NOMINATED PROPERTY: 4

LIST ALL STATES AND COUNTIES FOR PROPERTIES OVERLAPPING STATE OR COUNTY BOUNDARIES

STATE:	CODE	COUNTY:	CODE
Hawaii	15	Hawaii	01
STATE:	CODE	COUNTY:	CODE
STATE:	CODE	COUNTY:	CODE
STATE:	CODE	COUNTY:	CODE



SEE INSTRUCTIONS

11. FORM PREPARED BY

NAME AND TITLE: Russell A. Apple, Pacific Historian	DATE: 8/21/73
BUSINESS ADDRESS: Hawaii Group, National Park Service, U.S.D.I.	
STREET AND NUMBER: Suite 512, 677 Ala Moana Blvd.	PHONE: 808/521-3027
CITY OR TOWN: Honolulu	STATE: Hawaii 96813
	CODE: 15

12. CERTIFICATION OF NOMINATION

State Liaison Officer recommendation:
 Yes
 No
 None

Sunao Kido
 State Liaison Officer Signature

In compliance with Executive Order 11593, I hereby nominate this property to the National Register, certifying that the State Liaison Officer has been allowed 90 days in which to present the nomination to the State Review Board and to evaluate its significance. The recommended level of significance is National State Local

Howard Chapman
 Federal Representative Signature
 Regional Director, Western Region

Date: 20 NOV 1973

Title: _____

NATIONAL REGISTER VERIFICATION

I hereby certify that this property is included in the National Register.

A. R. Watters
 Director, Office of Archeology and Historic Preservation

Date: 7/24/74

ATTEST:

Charles Ashurst
 Keeper of The National Register

Date: 7-24-74

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