

PH0055520

**NATIONAL REGISTER OF HISTORIC PLACES
INVENTORY - NOMINATION FORM**

STATE:
HAWAII

COUNTY:
HONOLULU

FOR NPS USE ONLY

ENTRY DATE
AUG 19 1974

(Type all entries - complete applicable sections)

1. NAME

COMMON:
WAIALUA AGRICULTURAL COMPANY ENGINE NUMBER 6

AND/OR HISTORIC:

2. LOCATION

STREET AND NUMBER:
~~LUALALEI NAVAL AMMUNITION DEPOT~~ off HA 78

CITY OR TOWN:
LUALALEI

CONGRESSIONAL DISTRICT:
SECOND

STATE:
HAWAII

CODE:
15

COUNTY:
HONOLULU

CODE:
003

3. CLASSIFICATION

CATEGORY (Check One)	OWNERSHIP	STATUS	ACCESSIBLE TO THE PUBLIC
<input type="checkbox"/> District <input type="checkbox"/> Building <input type="checkbox"/> Site <input type="checkbox"/> Structure <input checked="" type="checkbox"/> Object	<input type="checkbox"/> Public <input checked="" 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 checked="" type="checkbox"/> Educational <input checked="" type="checkbox"/> Entertainment	<input type="checkbox"/> Government <input type="checkbox"/> Industrial <input type="checkbox"/> Military <input type="checkbox"/> Museum	<input type="checkbox"/> Park <input type="checkbox"/> Private Residence <input type="checkbox"/> Religious <input type="checkbox"/> Scientific	<input checked="" type="checkbox"/> Transportation <input type="checkbox"/> Other (Specify) _____ _____ _____

4. OWNER OF PROPERTY

OWNER'S NAME:
HAWAIIAN RAILWAY SOCIETY

STREET AND NUMBER:
BOX 11126

CITY OR TOWN:
Honolulu

STATE:
Hawaii

CODE:
15

5. LOCATION OF LEGAL DESCRIPTION

COURTHOUSE, REGISTRY OF DEEDS, ETC.:
Bureau of Conveyances

STREET AND NUMBER:
403 South Queen Street

CITY OR TOWN:
Honolulu

STATE:
Hawaii

CODE:
15

6. REPRESENTATION IN EXISTING SURVEYS

TITLE OF SURVEY:
None

DATE OF SURVEY:
 Federal State County Local

DEPOSITORY FOR SURVEY RECORDS:

STREET AND NUMBER:

CITY OR TOWN:
Honolulu

STATE:
Hawaii

CODE:
15

SEE INSTRUCTIONS

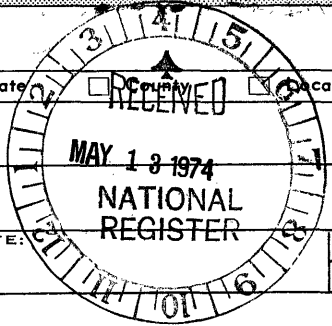
STATE: HAWAII

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7. DESCRIPTION

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

DESCRIBE THE PRESENT AND ORIGINAL (if known) PHYSICAL APPEARANCE

It is a 0-6-2T¹ Baldwin Locomotive Works Type Class 8-16, 2/3 D, oil-burning, steam-powered locomotive built to operate on narrow-gauge (36-inch) track.

It is in fully operational condition, and has been restored to its original appearance.

¹The 0-6-2T designation is an adaption of the Whyte System for classification of locomotives and is based on wheel arrangement. It employs a succession of numbers to indicate (1) the number of front truck wheels, (2) the number of coupled driving wheels, each set being numbered individually, and (3) the number of back truck, or trailing wheels. If any of these wheels are absent, a zero is placed in that space. Thus, Engine Number 6 has no (0) front truck wheels, six (6) drivers, and two (2) back trucks, or trailers, (0-6-2). The letter "T" placed after the last number stands for "tanker," and indicates that the locomotive is a saddle-tank type, with the water tank built so that it fits like a saddle over the boiler.



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 checked="" type="checkbox"/> 20th Century
<input type="checkbox"/> 15th Century	<input type="checkbox"/> 17th Century	<input type="checkbox"/> 19th Century	

SPECIFIC DATE(S) (If Applicable and Known) **1916**

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 type="checkbox"/> Historic	<input type="checkbox"/> Industry	<input type="checkbox"/> Science	_____
<input checked="" 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 type="checkbox"/> Military	<input checked="" type="checkbox"/> Transportation	_____
<input type="checkbox"/> Communications	<input type="checkbox"/> Music		
<input type="checkbox"/> Conservation			

STATEMENT OF SIGNIFICANCE

The Waialua Agricultural Company Engine Number 6 is an excellent type example of the steam-powered locomotives used on Hawaiian plantations during the late 19th and early 20th centuries. It is also the only locomotive designed and built in Hawaii, and is the only fully operational and authentically restored Hawaiian sugar plantation locomotive in the world.

The reason for being of Hawaii's railroads, common carrier and private line, in the 19th and early 20th centuries can be stated in one word: sugar. As sugar plantations developed in the Islands, the need for an efficient and cheap means of transportation from the cane from the fields to the mills, and bulk sugar from the mills to the harbors soon became apparent. When the 1876 Reciprocity Treaty between the Hawaiian monarchy and United States government was concluded, the vast American market was opened free of tariffs to Hawaiian sugar producers, and the need for improved transportation in the Islands became critical. The Kalakaua administration responded to these needs with the Railway Act of 1878. This act was designed to aid in the construction of railroads throughout the kingdom. The Kahului and Wailuku Railway on Maui was the first common carrier built, in 1879, followed by the Hawaiian Railroad Company on the Big Island (1880), the Oahu Railway and Land Company (1888), and the Hawaii Consolidated Railway on Hawaii (1899).

These common carriers linked towns to each other, and towns to harbors. They carried freight and passengers, but their most important was sugar. As these companies snaked their tracks out to previously isolated areas, large scale agricultural development followed close behind. As plantations were chartered and the lands cultivated, the plantation railroads came into being. These were rail lines built on the actual plantations to connect the fields and link up with the common carriers to get the sugar down to harbors for shipment to the United States and other, minor markets.

They were specialized lines, generally using narrow-gauge fixed and portable tracks and tough little steam locomotives to pull cane cars, barge cars, and cars filled with workers here and there on the plantations.

On Oahu, the Waialua Agricultural Company was reorganized as a plantation in 1889 by B. F. Dillingham, developer of the Oahu Railway and Land Company, and the Castle and Cook Company. The property had been used for sugar cultivation on a relatively small scale since 1836. (continued)

SEE INSTRUCTIONS

9 MAJOR BIBLIOGRAPHICAL REFERENCES

Conde, Jesse C., and Best, Gerald M., Sugar Trains: Narrow Guage Rails of Hawaii (Felton, California, Glenwood Publishers), 1973.
 Hungerford, John B., Hawaiian Railroads: A Memoir of the Common Carriers of the Fiftieth State (Reseda, California: Hungerford Press), 1963.
 "The Aloha Locomotive," DuPont Refinisher News, No. 181 (June-July, 1973), pp. 5-7.

10 GEOGRAPHICAL DATA

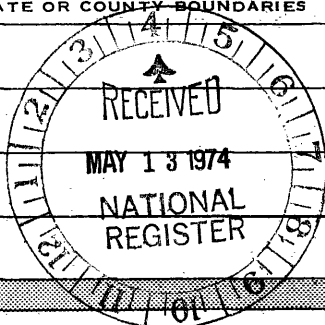
LATITUDE AND LONGITUDE COORDINATES DEFINING A RECTANGLE LOCATING THE PROPERTY			O R	LATITUDE AND LONGITUDE COORDINATES DEFINING THE CENTER POINT OF A PROPERTY OF LESS THAN TEN ACRES		
CORNER	LATITUDE	LONGITUDE		LATITUDE	LONGITUDE	
	Degrees Minutes Seconds	Degrees Minutes Seconds		Degrees Minutes Seconds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

4/589/80
2369670
60

APPROXIMATE ACREAGE OF NOMINATED PROPERTY: NA

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

STATE:	CODE	COUNTY	CODE
STATE:	CODE	COUNTY:	CODE
STATE:	CODE	COUNTY:	CODE
STATE:	CODE	COUNTY:	CODE



SEE INSTRUCTIONS

11 FORM PREPARED BY

NAME AND TITLE:
Gary T. Cummins, Historian, Hawaii Register of Historic Places

ORGANIZATION: Department of Land and Natural Resources, State Parks Div. DATE: April 19, 1974

STREET AND NUMBER:
P. O. Box 621

CITY OR TOWN: Honolulu STATE: Hawaii CODE: 15

12 STATE LIAISON OFFICER CERTIFICATION **NATIONAL REGISTER VERIFICATION**

As the designated State Liaison Officer for the National Historic Preservation Act of 1966 (Public Law 89-665), I hereby nominate this property for inclusion in the National Register and certify that it has been evaluated according to the criteria and procedures set forth by the National Park Service. The recommended level of significance of this nomination is:

National State Local

Name *Dunao Kido*

Title Chairman, Department of Land and Natural Resources, State of Hawaii

Date _____

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

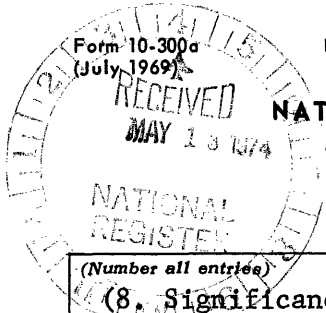
[Signature]
 Director, Office of Archeology and Historic Preservation

Date 8/19/74

ATTEST:

[Signature]
 Keeper of The National Register

Date 8.12.74



**NATIONAL REGISTER OF HISTORIC PLACES
INVENTORY - NOMINATION FORM**

(Continuation Sheet)

STATE	
HAWAII	
COUNTY	
HONOLULU	
FOR NPS USE ONLY	
ENTRY NUMBER	DATE
	AUG 19 1974

(Number all entries)

(8. Significance, continuation sheet #1)

A railway was surveyed immediately after the reorganization, and by 1901, 24 miles of fixed track of a narrow guage (36-inch) compatible with that of Dillingham's Oahu Railway and Land Company was in place. In addition, two locomotives, both Baldwin Locomotive Works (Philadelphia, Pa.) 0-6-OT's were in operation.

Both the plantation and its railway continued to grow during the period before World War I. By 1908, the three main sections of the plantation: Waialua, Helemano, and Kawailoa, were connected by rail. After that, much time and money was spent in improving the line by straightening curves, filling trestles, and replacing worn rails and ties. By 1910, there were 30 miles of fixed track carrying five locomotives and 600 cane cars.

In 1916, the company purchased some extra boilers from the Baldwin Locomotive Company works in Philadelphia. The reason for this purchase was not to repair existing rolling stock, but to construct an entirely new locomotive. Between 1916 and 1919, Locomotive # 6 was built in the Waialua Agricultural Company shops by employees. It was built along the familiar lines of a Baldwin Company "saddle tanker" locomotive, a type widely used then on Hawaiian sugar plantations. When completed, it was not a "tin can and baling wire" job, but a well-designed, functional piece of equipment. It remained in constant service from 1919 to 1952, with only one instance of major maintenance, in 1931, when a new boiler was installed.

The Waialua Agricultural Company began to phase out its railroad in favor of rubber tired trucks as early as 1946. However, it was not until 1952 that the transition was complete. Large "Tournahauler" diesel trucks capable of carrying heavy loads across rough terrain at less cost then replaced the entire railroad operation.

Engine # 6 was placed in a park near the company's mill as an exhibit. It remained there for 19 years, steadily deteriorating due to vandalism, weather, and lack of maintenance. In 1971, the company decided to haul it away and cut it up for scrap.

At that point, the Hawaii Chapter of the Railroad Historical Society offered to take over the locomotive and restore it to its original condition. The Wailalua Agricultural Company agreed to the transfer on condition that the restoration would be completely authentic. The Railroad Historical Society (now the Hawaiian Railway Society) took the engine to the Lualualei Naval Ammunition Depot, west of Honolulu, where existing railroad storage and repair facilities were volunteered by the U. S. Navy.

On February 21, 1971, the actual restoration work began, and by November 1972, the locomotive had been restored to its original appearance and was again in operating condition. It was run for a time on a small section of track within the depot by the Society for its members on weekends, but this practice was recently banned by the Navy. The Navy has ordered the Society to remove the engine from its property this year, and once again, its future is somewhat in doubt.