



No. 3525

Department of Commerce and Labor  
COAST AND GEODETIC SURVEY

\_\_\_\_\_  
*Superintendent.*

*State:* \_\_\_\_\_

## DESCRIPTIVE REPORT.

To accompany topog. sheet "B", sta. Puu Papai to sta. Puu Iloli, Molokai Id. T.H.  
March-April, 1915. Eoline R. Hand, Asst., Chief of Party.

This sheet embraces the middle of the S. coast of the island: the W. end shows the commencement of the gentle slopes of Mauna (mt.) Loa, and E. of this is a plain which extends N. across to the cliffs on other side, and in which area the hill known as Kualapuu, or Middle Hill, stands most conspicuously. The E. end shows rugged country: the steep, deeply eroded slopes rise to a height of about 4000 ft. at the central ridge of the island.

The shore is sand beach, with extensive mud flats, and the land. The slopes may be said to be barren: there is a bunch of grass here but it is very scant. The shore is lined with algeroba, a small leafed bush-like growth. A reef, coral crosses the sheet, between 1 1/2 and 2 mi. offshore: it was impossible to secure even an approximate location of this reef line from the shore.

Erosion by wind and rain is playing havoc with this island: the original lava has broken down under time and weather into small rocks and red dust: the latter is carried down to the sea by the agents above-mentioned with the result that the space between edge of reef and shore is filled with mud, and this is especially true near the W. end where the trade has a free haul across the low saddle: here the mud is so level and extensive that it is difficult to say just where is the high water line for a change of an inch or so of tide sends this line in and out hundreds of feet: at very high tides a sheet of water extends away back across the road and among the trees in the cove E. of Puu Iloli. Another sign of the damaging erosion is seen on the plain above this cove where small boulders are found up on little pedestals formed by the wind blowing the dirt from underneath: the pedestal becomes long and slender, breaks, and the process starts again with the stone in its lower position. A kind of weed which would flourish in this dry soil and whose roots tended to bind and protect, would be of great value to this part of the island: mangrove has been planted down the cove with some such idea in mind.

A good road traverses the sheet, and a branch goes up over the plains to Kalae, the house of Cooke, the manager of Molokai Ranch, and to the point where a trail goes down to Kalaupapa, the leper settlement. Nearly all of this area is owned or leased by the Molokai Ranch, whose main business is cattle raising on the plains about Middle Hill. They also make considerable honey, and apiaries are placed at frequent intervals along the beach road, where the bees feed on the algeroba tassel. Most of this honey was shipped to Germany (being inferior, not finding market on Coast) but account of the war there is now no market and it is accumulating at Kaunakakai where it may be had at the remarkable price of \$1.50 for Five Gallons.

Kaunakakai is the ranch headquarters and is a valuable harbor. a mole is built out across the flat to a wharf in the deep bight of the reef. this, together with buoys, range, steamers, exports, etc. was written up in my report accompanying revision of Kaunakakai Harbor chart no. 4106, recently submitted to Office.

I have established several white cairns up on the slope, for the purpose of locating the reef line and other sounding.

As the town is so low, and mostly obscured by algeroba, the great gulch above will be useful in directing a course for Kaunakakai Harbor. When close in, the range formed by green church (wh. trimmed) and small wharf shed, will bring up to the channel buoy.

*Eoline R. Hand*  
Asst., U.S.C. & G.S.

# LIST of POSITIONS T-3525

to accompany topog. sheet "B", sta. Puu Papai to sta. Puu Iholi, Island of Molokai, T. H.

March-April, 1915.

Eoline R. Hand, Asst., Chief of Party.

\* suggestions for offshore.

Name	φ	D.M.	λ	D.P.	hei.	Description
*No	21°06'		157°08'		220	Whitewash on huge rock boom inside: see "A", possibly different name.
Red	06	<sup>810</sup> <sub>1235</sub>	157°04'	<sup>1581</sup> <sub>151</sub>		Sq. red ha. pyramid root, on beach, 3 1/2 mi. W. of K'Kai, orient. a Luahine.
Gin	06		157°03'			Huge, low cairn in E. corner of wall of filled in fish pond.
Pole	06		03'			Pole in cairn out in tide flats 1 1/2 mi. E. of red house "Red" + E. of "Gin."
Coco	21°05'		157°02'			More Ely of 2. houses at coconut grove 1 mi. W. of K'Kai.
Frang.	05		157°01'		27	fl. w. day mark, triangle, base down.
Ch	05		01'			Large green church, wh. trimmed. Steeple W. corner.
Cor.	05		01'			Outer andly cor. shed on wharf.
Mun	05		01'			Lg. yel. ha. on beach, most Ely (Munro)
*Pit	05	<sup>1065</sup> <sub>780</sub>	157°00'	<sup>1526</sup> <sub>406</sub>	130	Rocky hill just E. of K'Kai, and boom inside.
*Hap	05	<sup>161</sup> <sub>1624</sub>	156°59'	<sup>1204</sup> <sub>528</sub>	145	Whitewashed cairn, 8 ft., 2 mi. E. of K'Kai and boom inside.
Sob	21°04'		156°57'			Log, 16" diam, on end in end sharp sand point at Kawela, just W. great gulch.
W. P.	21°03'		156°55'			Where W. end ruins fish pond wall cuts sand pt. W. of cave 160 m. E. of grey shack & boom.

See revision K'Kai chart 416  
for D.M. and D.P. at both  
range lights and of  
other stations, the  
green church, etc. being  
under different names.

RECOVERY NOTES, TOPO. STATIONS

SHEET 3525

RED Recovered as described.

DO " " "

COCO " " "

GIN Searched for and not recovered.

Pole " " " " "

P.L.B.

PIN 1" by 1" pole found standing in center of cross cut in rock.  
Fence runs about 1 m. east of the station.

HOP Cairn of rocks had fallen down on the south side and was rebuilt,  
and whitewashed. It is now about 6 ft. high.

Sob Not found after search. Believed to be gone.

CULVERTS AT KAWELA Western one is now a concrete ford. Eastern one  
is wooden bridge.

WE Not found after search. Signal placed where wall and beach intersect.

HAM Not searched for. Seen from sea as white cairn.

HUN Remains of cairn found, rebuilt and whitewashed.

TOP Low, circular cairn found on top of hill.

C.J.W.

U. S. C. & G. S. S. PIONEER, O. W. Swainson, Chief of Party.

1930-1931

LIST of POSITIONS F-3525

to accompany topog. sheet "B," sta. Pau Papui to sta. Pau Holi, Island of Motobuat, T. H.

*Marion A. Pratt, 1915.*  
*Poline B. Harrod, Asst. Chief of Party.*

[illegible]

Applied to compilation new chart 4120 - Feby, 26, 1941 - JFW

83.  
57A  
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3525<sup>a</sup>

C. & G. SURVEY,  
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Department of Commerce and Labor  
COAST AND GEODETIC SURVEY

\_\_\_\_\_  
Superintendent.

State: \_\_\_\_\_

DESCRIPTIVE REPORT.

*for*  
*Topo* Sheet No. 3525

LOCALITY:  
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\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

1905

CHIEF OF PARTY:

*C. R. Hand*

3525A

DESCRIPTIVE REPORT

To accompany topographic sheet of Kaunakakai Harbor, Molokai, T.H.  
revision of chart no. 4106.

Eoline R. Hand, Asst., Chief of Party.

The mole and wharf is apparently same as last survey: there is a small wharf shed which may be an addition.

The shoreline is changed as shown: the salt pans are a recent addition: the ground around these pans, and also around the range lights, is very low: at highest tides there is an inch and more of water all through this area, in spots, between the salt pans and the railroad, and as far back as the main road.

The range lights, and buoys, are as shown: the direction of range was ascertained both by compass bearing from one light, and by setting up table at W. end of wharf and taking several readings on the red held in small boat maneuvered across range. The range was found to be 67 metres, or 220 ft. from edge of wharf.

The edge of reef opposite wharf was found in same way.

Kaunakakai is the principal landing on the island (possibly excepting the lower settlement on other side) it is the headquarters of the Molokai Ranch, which owns or leases most of the surrounding land. There is a Post office, two unimportant stores, and a wireless station: this station is small, being about one kilowatt. Messages are relayed to Lahaina, Maui, for Honolulu.

The S.S. Mikahala, I. I. S. N. Co., calls in on Tuesdays from Honolulu, and on Saturdays for Honolulu. Cattle and honey are exported by the ranch: this honey formerly went to Germany but now seems to be a drug on the local market account war.

The church makes good landmark: it is sketched and described on sheet. The wireless pole also shows well. The rest of the village is almost entirely obscured by a dense growth of algerobas.

The railroad shown is simply for handling freight to and from end wharf: the small cars are pulled by mules.

There is now no railroad along coast as formerly shown. This road was built to handle sugar cane, but after a year or two the Am. Sugar co. abandoned the attempt to grow cane, because of lack of water.

The best way to find this point is to head in towards the immense gulch which will be seen South of the two conspicuous red hills (Puu Luahine being the more N.W. by hill). This gulch is unmistakable, is very deep and has cliff sides: it is the first great gulch to the right of (or East) the great saddle seen from offshore or it is the last of the succession of great gulches which start at East end of Molokai, and continue up to the above mentioned saddle.

*Eoline R. Hand.*  
*Asst. U.S. Geol. S.*

P.S. By keeping Wharf house and church in range you will bring up to channel buoy. *ELL*

# LIST of POSITIONS

T-3525a

to accompany topog. sheet of Kaunakakai Harbor, Molokai, T.H.  
revision of chart no. 4106

May, 1915.

Eoline R. Hand, Asst., Chief of Party.

Name	φ	D.M.	λ	D.P.	hei.	Description.
Mun	21°05'	649 1196	157°01'	571 1161		house of James Munro, asst. mgr. Molokai Ranch.
Less.	05'	680 1165	01'	926 806	118	Wireless mast: station in house to East.
Green	05'	723 1122	01'	1015 716		Steeple green church near end mole: sketch on sheet.
Pole	05'	1148 697	01'	1271 461		flagstaff back of salt pans.
Fence	05'	296 1349	01'	1348 384		Shore end of fence on N.W. side of mole (longer of two fences)
Cor.	05'	104 1741	01'	1554 178		the outer, and W. corner of wharf shed.
fr. range	21°05'	854 1011	157°01'	1125 607	27	<del>fl.</del> wh. day beacon, wh. skeleton tower and triangle
rear "	05'	988 857	01'	1021 712	40	<del>fl.</del> wh. " " " " " "

Not Searched For

# LIST of POSITIONS T-3525A

to accompany topog. sheet of Kaurakakai Harbor, Molokai, T.H. May, 1915.  
revision of chart no. 9106

Eoline R. Lund, Asst., Chief of Party.

Name	Lat	Long	D. P. No.	Description
Mun	21° 05' 64.8"	157° 01' 11.6"	571	house of James Munro, east mgt. Molokai Harb.
Less	05' 18.5"	01'	826, 118	wireless most. station in house to East
Green	05' 17.2"	01'	1918	steep green church near end mole. sketch on sheet
Pole	05' 14.8"	01'	1271	flagstaff back of salt ponds
Fence	05' 14.9"	01'	1348	shore end of fence on N.W. side of mole (longer of two fences)
Cor.	05' 14.9"	01'	1348	the outer, and W. corner of wharf shed.
Fr. range	21° 05' 15.7"	157° 01' 11.6"	27	End. W. N. day beacon, with skeleton tower and flying light
near "	05' 18.5"	01' 19.2"	40	End. W. N. day beacon, with skeleton tower and flying light