DESCRIPTIVE REPORT

TO ACCOMPANY TOPOGRAPHIC SHEET F

AT PAUAUAU, HAWAII

U.S.C. & G.S.S. PIONEER O. W. SWAINSON, CMDG.

AUTHORITY

The area in this work was done in accordance with instructions dated September 19, 1931, to the Commanding Officer of the PIONEER for Project No. 69.

LIMITS

This survey was done on a scale of 1:5000 and covers the area from a junction of Honakaa eastward to a point approximately 1 mile east of Pauauau Landing.

CHARACTER OF CONTROL

The usual method of traverse and resection cuts were used. Triangulation station IKI was computed by a three point fix from theodolite cuts on recovered stations. Station NEW was then located from IKI and PAAUAU STACK. These two with HONAKAA and PAAUAU STACKS gave the main control. No triangulation stations were visible from the east end of the traverse but this end was checked from known points.

Inasmuch as it was not possible to traverse in most places along the base of the bluffs on account of the narrow shoreline and rough seas, the high water line was located from the top of the bluffs by means of cuts and offsets.

This survey joined properly with previous surveys.

GENERAL DESCRIPTION

The coast line is rocky, with precipitous bluffs varying in height from 100 to 200 feet. Directly back of the bluffs is a row of ironwood trees to protect the sugar cane fields from the salt spray which comes over the bluffs. There are six mooring buoys off Pauauau Landing used to hold the ships in place while loading sugar. This mooring place affords little protection from the northeast trade winds, but is the best available along the immediate stretch of shoreline.
LANDMARKS

The most prominent inshore landmark along this stretch of shoreline is the landing at Paauhau plantation. This landing consists of a concrete incline running down from a large building on the edge of the cliff to a platform on which there is a derrick. This derrick is shown on the sheet as station DER. The high Paauhau chimney shows well from offshore.

CLOSING ERRORS OF TRAVERSE

There were no closing errors of the traverse run.

LIST OF NEW NAMES

No new names were assigned. All the names shown on the sheet were taken from the topographic map of this section of the island by the U. S. Geological Survey.

C. W. Swainson,
H. & G. Engineer,
Commanding PIONEER.
LANDMARKS FOR CHARTS

Long Beach, California,

September 29, 1933

DIRECTOR, U. S. COAST AND GEODETIC SURVEY:

The following determined objects are prominent, can be readily distinguished from seaward from the description given below, and should be charted.

O. W. Swainson, Chief of Party.

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>POSITION</th>
<th>METHOD OF DETERMINATION</th>
<th>CHARTS AFFECTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Sharp pinnacle rock 50</td>
<td>20 6 1872</td>
<td>Old</td>
<td>Hawaiian Topo.</td>
</tr>
<tr>
<td>feet high; once part of</td>
<td>15 5 27 505</td>
<td></td>
<td></td>
</tr>
<tr>
<td>main bluff but erosion has</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>left it standing in the</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>clear.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A list of objects which are of sufficient prominence for use on the charts, together with a description of the same, must be furnished in a special report on this form, and a copy of such report must be attached by the Chief of Party to his descriptive report. The selection, determination, and description of these points are of primary importance.

The description of each object should be short, but such as will identify it; for example, standpipe, water tower, church spire, tank, tall stack, red chimney, radio mast, etc. Generally, flagstaffs and like objects are not sufficiently permanent to chart.
To: The Director,
U. S. Coast and Geodetic Survey,
Washington, D. C.

From: The Commanding Officer,
U.S.C. & G.S.S. PIONEER.

Subject: Topographic survey No. 4693 - Pinnacle rock.

Reference: SO-DRM dated September 22nd.

There are respectfully forwarded herewith forms Nos. 524 and 567, describing pinnacle rock on north coast of Hawaii, as requested in above reference.

O. W. Swainson,
H. & G. Engineer,
Commanding PIONEER.
The Topographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field Letter ........................................

REGISTER NO. 4693

State ........................................ TERRITORY OF HAWAIIAN IS.

General locality ................................... NORTHERN HAWAIIAN IS.

Locality ........................................... PANUAU LANDING AND VICINITY

Scale 1:5000 ........................................ Date of survey .................................. FEBRUARY 1932

Vessel .............................................. U.S.C. & G.S.S. PIONEER

Chief of Party .................................... C. W. Swainson

Surveyed by ....................................... F. L. Bernstein

Inked by ............................................ F. L. Bernstein

Heights in feet above MSL to ground - to tops of trees

Contour Approximate contour Form line interval 100 feet

Instructions dated .................................. SEPTEMBER 1931

Remarks: .............................................