

4684

U. S. COAST & GEODETIC SURVEY
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Form 504
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

State: *T. Hawaii*

11-5613

DESCRIPTIVE REPORT.

Topographic Sheet No. *B* 4684

LOCALITY:

Hawaiian Islands

Lisianski Island

1931

CHIEF OF PARTY:

O. W. Swainson

N. L. G. E.

DECLASSIFICATION BY NOAA
PURSUANT TO DOC SYSTEMATIC REVIEW
GUIDELINES AS DESCRIBED IN SECTION
3.3 (a), EXECUTIVE ORDER 12356

applied to chart 4183
" " " 4186.

Sept. 9, 1940 G.K.S.
Nov. 10, 1942 L.A.M.

POST-OFFICE ADDRESS: Honolulu, T. H.

TELEGRAPH ADDRESS:

EXPRESS OFFICE:

1931

APR 18 1931
DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

Ship PIONEER,

April 6, 1931.

To: The Director,
U. S. Coast & Geodetic Survey,
Washington, D. C.

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

Subject: Season's Report, 1930, Project No. 55. # 43

Enclosed are some pictures which please place
in an envelope and attach to my season's report, previously
forwarded.

O. W. Swainson
O. W. Swainson,
H. & G. Engineer,
Commanding PIONEER.

DESCRIPTIVE REPORT TO ACCOMPANY

TOPOGRAPHIC SHEET B.

Lisianski Id.

Project No. 55.

Instructions dated Feb. 10, 1932.

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

O. W. Swainson, Cmdg.

GENERAL DESCRIPTION OF COAST

The shore line is sand nearly the entire circumference of the island except on the east side where there are rock ledges at the water line in two places for a total length of about one half mile.

The island is low and is visible only about ten miles and is grass covered. There is a sand spot near the top of the hill at the north end of the island which is visible from the north. This spot is surrounded by grass and is the most prominent feature of the island.

LAND MARKS

There are no land marks.

CHARACTER OF CONTROL USED

A short base was measured with 30 meter tape from Lon to North Base and theodolite angles measured at Lon, North Base, Wag, and Pat to locate these four stations. Station Lon or Lisianski was located astronomically by Mr. E. O. Heaton. (*This gave Geo. Pos. and Azimuth*).

Only a short traverse from Lisianski to Cam to Gil was run. This closed with no error. The rest of the shoreline was located from setups at Lon, North Base, Wag and Pat.

DESCRIPTION OF AUXILIARY SURVEYING METHODS

The rocks shown north of the island were located by cuts from North Base and Wag. Two cuts being obtained to each. These spots are merely the parts of reefs that show above water.

GENERAL

Several small coconut and ironwood trees were planted with the hope that they would grow and thus aid the navigator in sighting the island. The island is extremely difficult to see at the present time.

COMPARISON WITH PREVIOUS SURVEYS

The elevations as shown on the chart, H. O. No. 4, are in error. The highest elevation at present is near the northeast side and is only 20 feet instead of 44 feet as shown on No. 4.

The island has also filled in on the southeast point and is now longer than is shown on the chart.

The island is almost completely covered with grass at present.

STATISTICS

Miles of shoreline - 3.0 statute miles.
Area - 0.5 square statute miles.

C. J. Wagner
C. J. Wagner,
Jr. H. & G. Engineer,
U.S.C. & G.S.S. PIONEER.

Approved and forwarded:

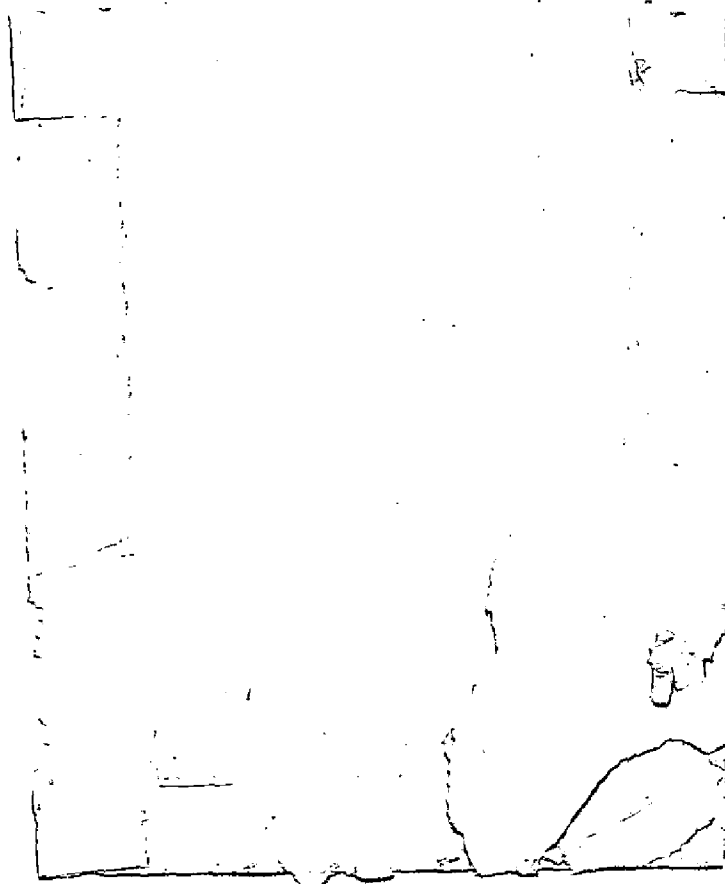
O. W. Swainson
O. W. Swainson,
H. & G. Engineer,
Commanding PIONEER.

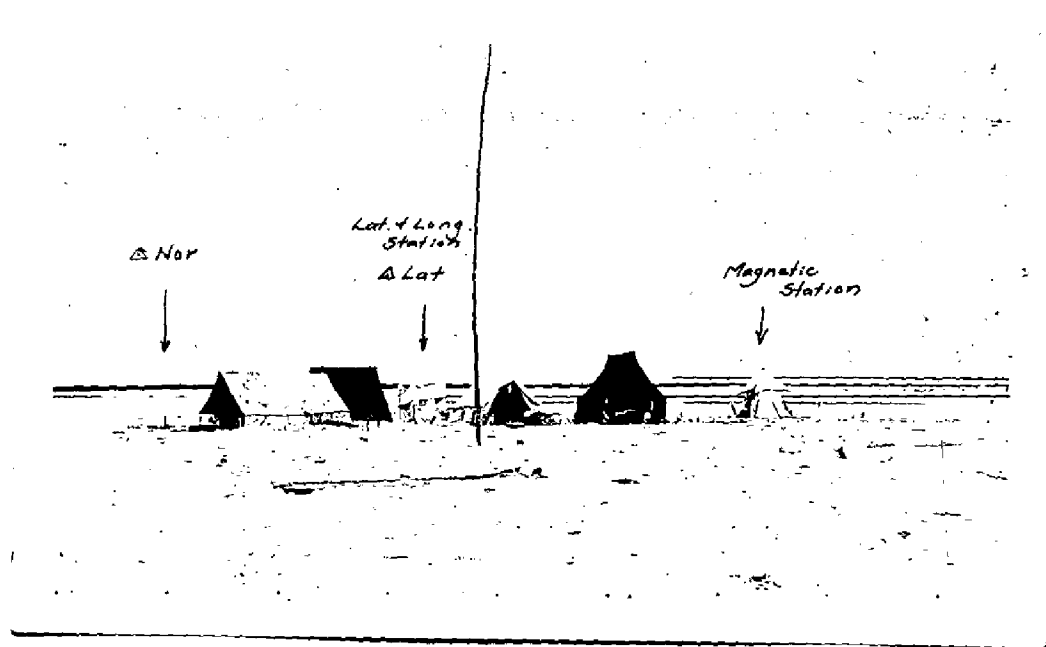
<i>Astro. Sta.</i>			<i>El. above</i>
<i>△ Lisianski 1931</i>	<i>Lat 26° 04' 03.56" (109.5 m)</i>	<i>Long 173° 58' 09.51" (264.3 m)</i>	<i>MHW 17'</i>
<i>△ Wagg</i>			<i>20'</i>
<i>△ N. Base</i>			<i>17'</i>
<i>△ Pat</i>			<i>8'</i>

LIST OF PLANE TABLE POSITIONS.

G11	26° 04'	777.0
	173 58	656.0
Ray	26 04	906.0
	173 58	384.0

PHOTOGRAPHS





Latitude, Longitude and Magnetic $\sim 7^{\circ} 11' E$
Laysan Island, T.H. 1930.

(Looking Northeast.)

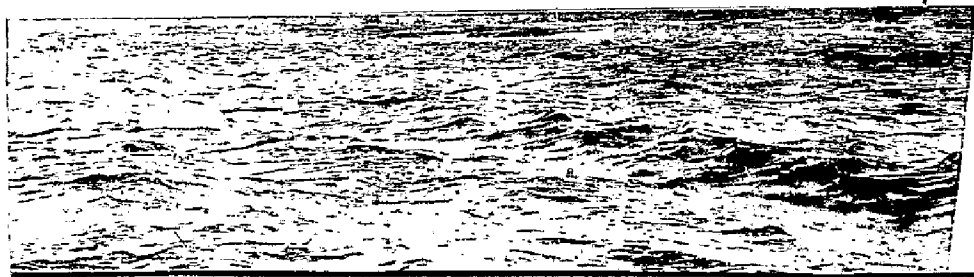
Sea Rip



Bird life on Laysan Island, T.H. 1930.

,
,
,
,

See Ref



LISIANSKI Island, T.H.

Δ Jo in foreground.

Taken from point $1\frac{1}{2}$ miles West (r) of the Island.

1-468



Lisianski Island

Guano east of A Lisianski.

T. 4004

602



Lisa and T.H.

Shows grass on Kijana Id.

The coconut was planted near A Wag.

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622



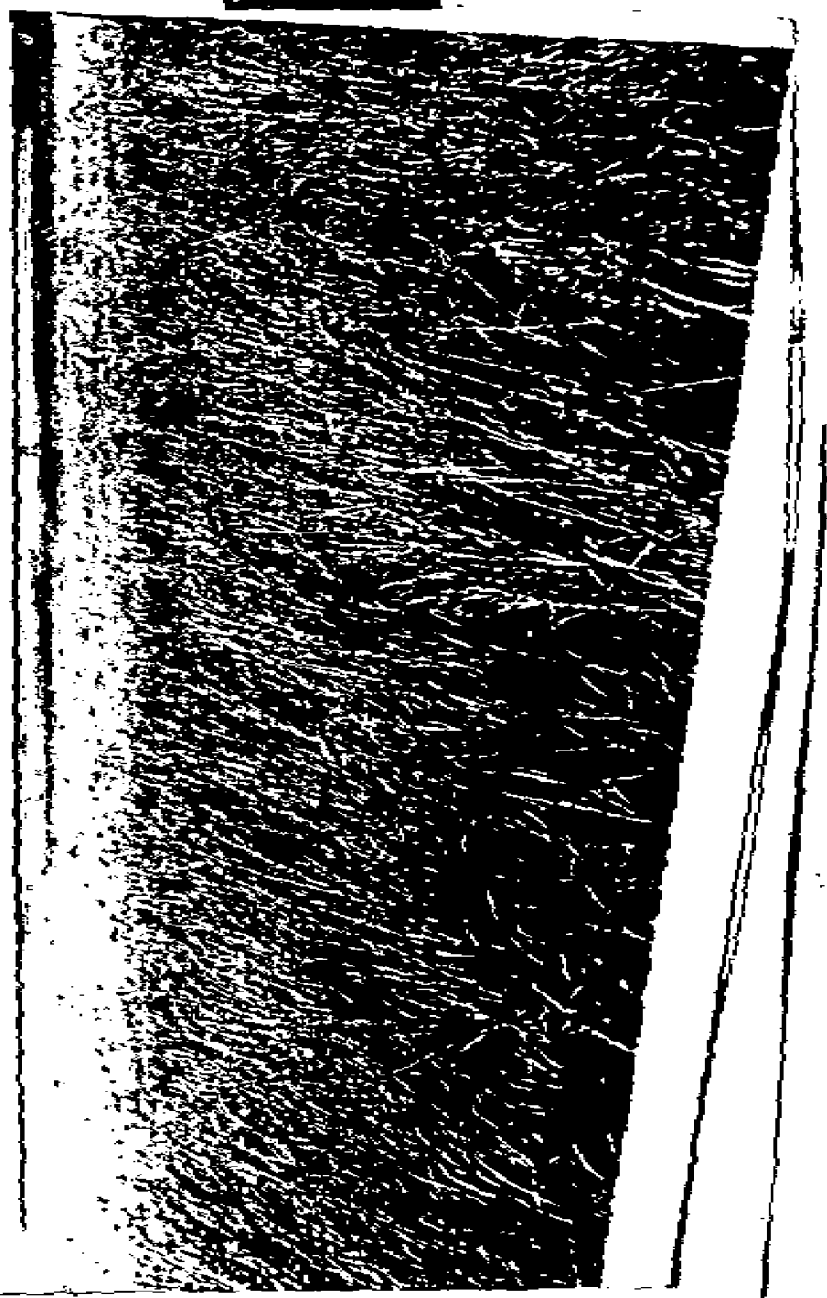
Gannets with their young (On Laysan Island T.H.)

See. Ref.



Gannets nesting in Ironwood tree on
Laysan Island, T.H. 1930.

See Refs



Lisianski Island, T. H.

Looking W x S on Island from

A Wag to A Lisianski.
Magnetic Tent at Lisianski
can be seen under " * " ,

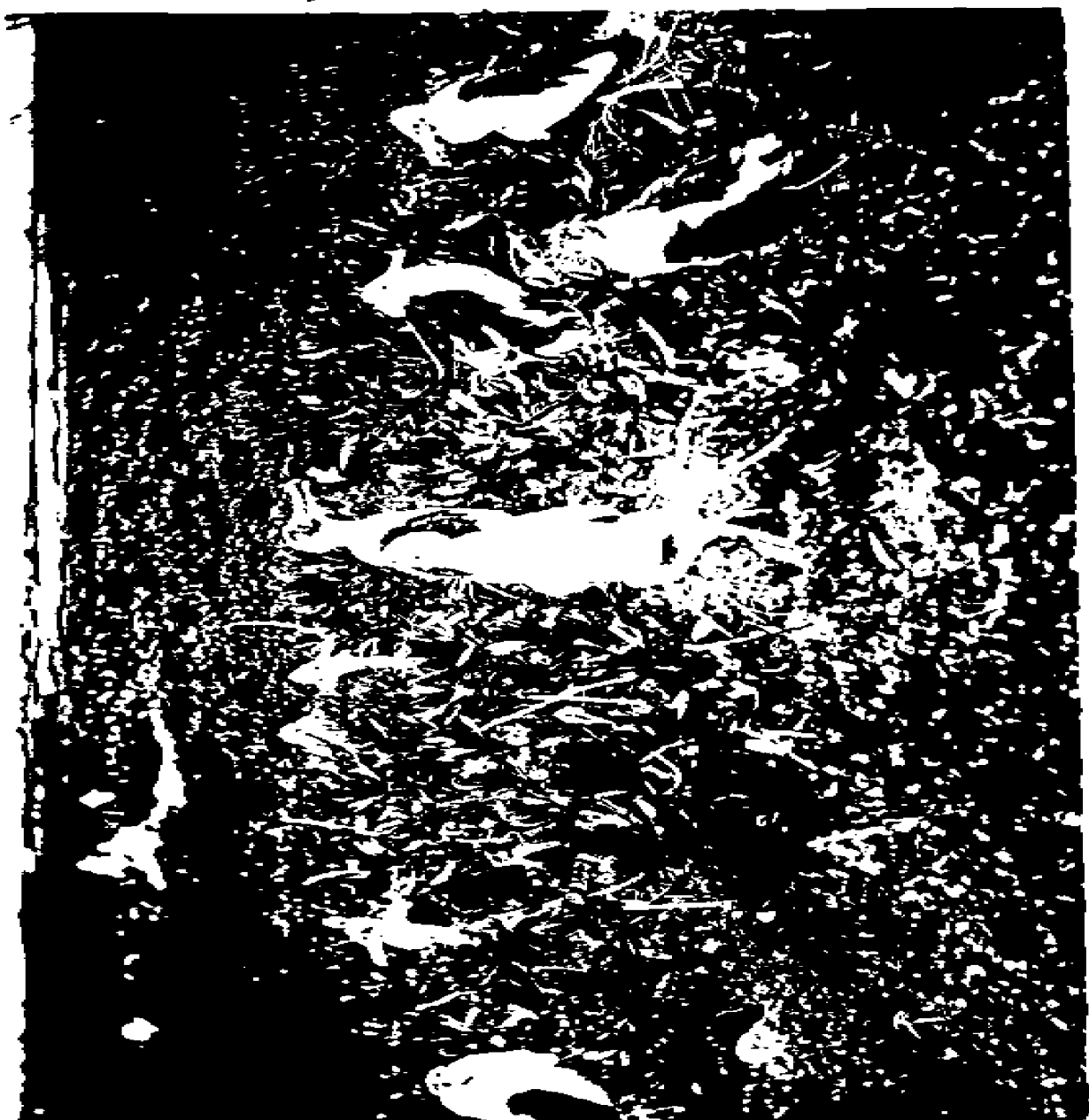


Tide Gauge

Only trees on Laysan Island.
(Two coconuts and one ironwood.)

(Looking southwest.)

5th July



Young Frigate or Man-of-war birds on Laysan Island, H.

1930.



Lat. & Long.
Station

A Lat

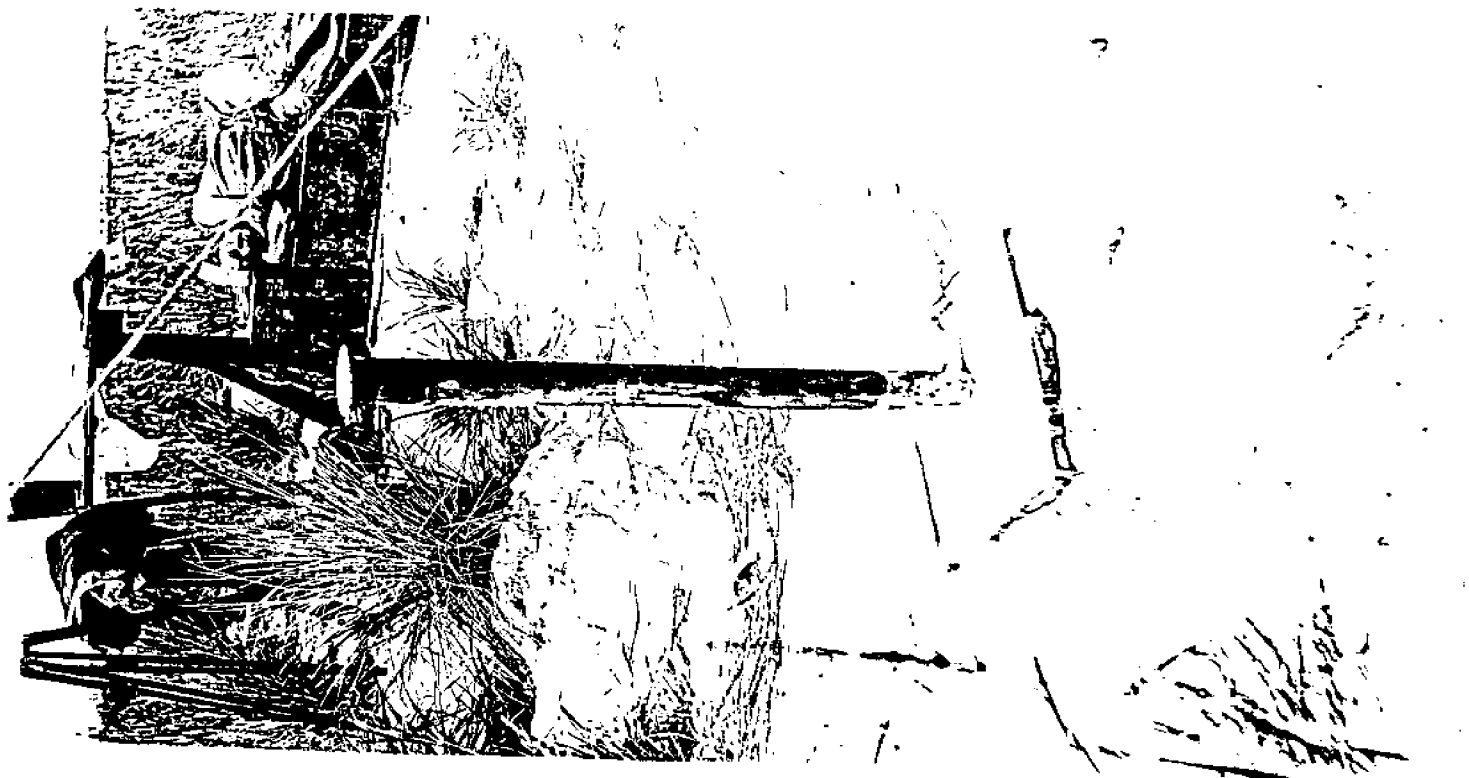
Δ Nor

Magnetic
Station

Latitude, Longitude and Magnetic Camp

Laysan Island, T. H. 1930

(Looking Northeast.)



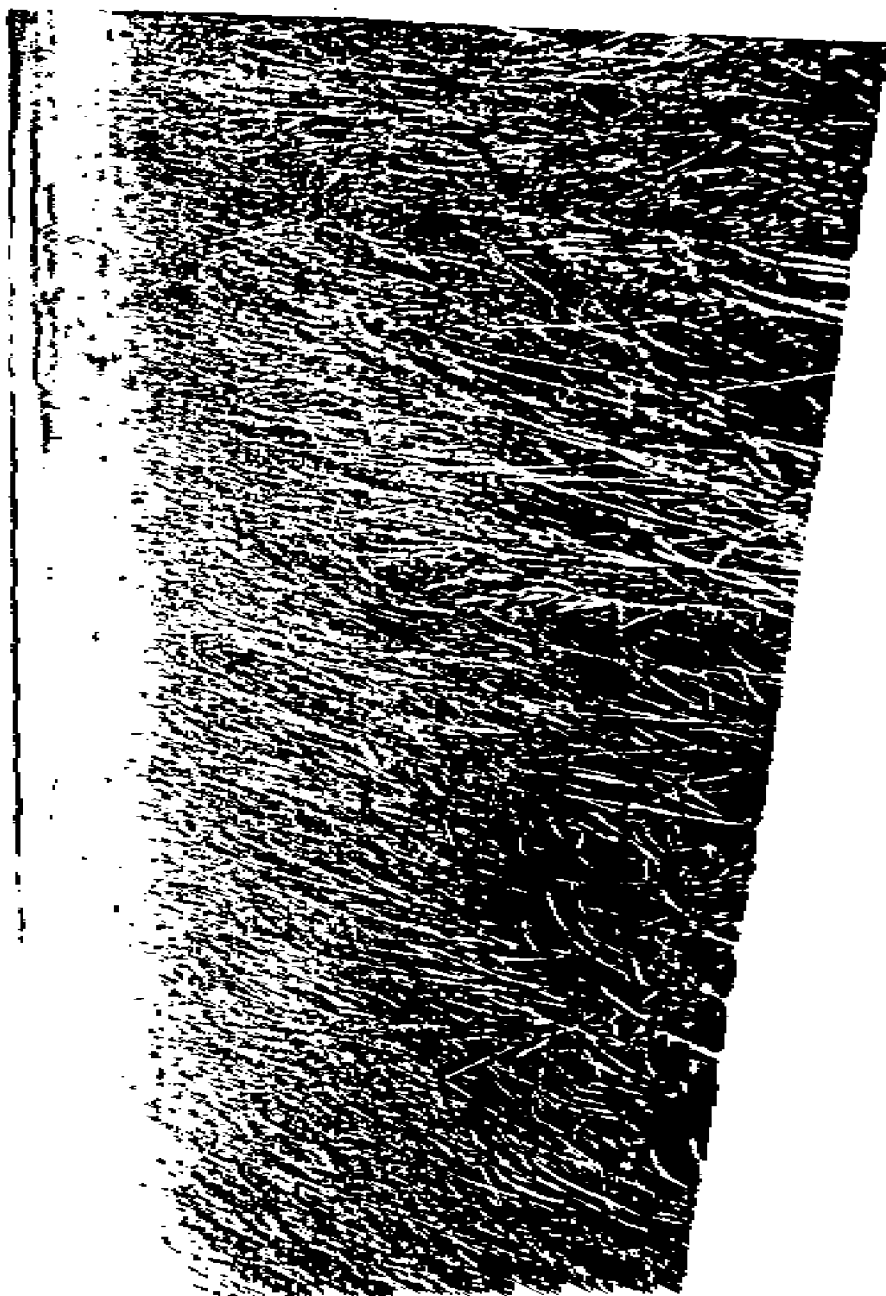
Lisianski Island, T. H.

There permanent mark placed
on Lisianski Id., to mark latitude, longitude,
and magnetic station. marked. Lat, long, 1931
and is at spot marked Lisianski; 1931.
this type also placed on Laysan Island.

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Gannets with their young (On Laysan Island, T.H.)



Lisianski Id, HI.

VXS

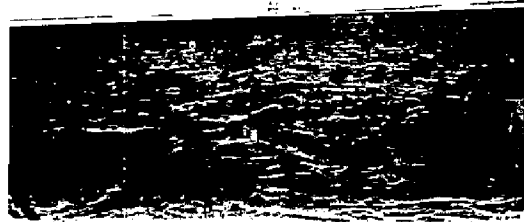
Looking ~~SW~~ NW Island from A Wg to

A Lisianski. Magnetic Tent at A Lisianski

can be seen under "X".

h 24 1

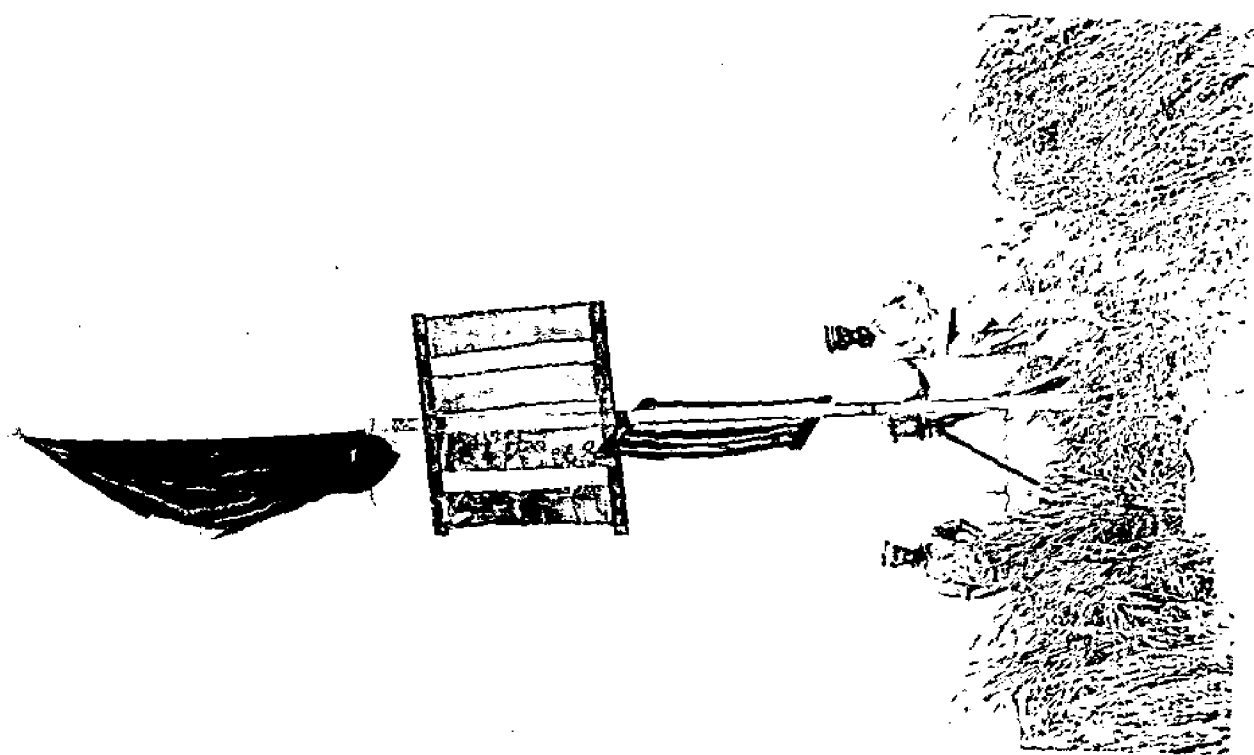
2 0



12/

Westside of island from
2 miles offshore

Laysan Island, T. H.



Lisianski Id.

Signal at Δ Wag and party taking
cuts to buoys. (Note signal really vertical).

T-484

709

REVIEW OF TOPOGRAPHIC SURVEY No. 4684

Title (Par. 56) *Lisianski Island, Hawaiian Islands*Chief of Party *W. Swinson* Surveyed by *C. J. Wagner* Inked by *C. J. W.*Ship *Pioneer* Instructions dated *Feb. 10, 1930* Surveyed in *Aug. 1931*

1. The survey and preparation for it conform to the requirements of the Topographic Manual. (Par. 7, 8, 9, 13, 16.) ✓
2. The character and scope of the survey satisfy the instructions. ✓
3. The control and closures of traverses were adequate. (Par. 12, 29.) ✓
4. The amount of vertical control that the Manual specifies for -contours-formlines- was accomplished. (Par. 18, 19, 20, 21, 22, 23.) ✓
5. The delineation of -contours-formlines- is satisfactory. (Par. 49, 50.) ✓
6. ~~There is sufficient control on maps from other sources that were transmitted by the field party to enable their application to the charts. (Par. 28.)~~
7. High water line on marshy and mangrove coast is clear and adequate for chart compilation. (Par. 16a, 43, 44.) ✓
8. The representation of low water lines, reefs, coral reefs and rocks, and legends pertaining to them is satisfactory. (Par. 36, 37, 38, 39, 40, 41.) ✓
9. Rocks and other important details shown on previous surveys and on the chart were verified. (Par. 25, 26, 27.) ✓
10. ~~The span, draw and clearance of bridges are shown. (Par. 16c.)~~
11. Locations and elevations of summits are given. (Par. 19, 51.) ✓
12. ~~The tree line was shown on mountains. (Par. 16g.)~~

NOTE: Strike out paragraphs, words or phrases not applicable and modify those requiring it. Paragraph numbers refer to those in the Topographic Manual. Use reverse side for extending remarks.

13. The descriptive report covers all details listed in the Manual, in so far as they apply to this survey. (Par. 64, 65, 66, 67.) ✓
14. The descriptive report also contains additional information required in aero-topography relative to type of photographs, method of compilation and type of ground control.
15. The descriptions of recoverable stations and references to shore line were accomplished on Form 524. (Par. 29, 30, 57, 67 except scaling of DMs and DPs, 68.) ✓
16. No list of landmarks for charts was furnished on Form 567 and plotting checked. (Par. 16d, e, 60.) *Desc. Rep. states no landmarks exist. Ironwood and coconut trees were planted by the field party.*
17. The magnetic meridian was shown and declination was checked. (Par. 17, 52.) ✓
18. The geographic datum of the sheet is *Lisianski Astro, 1931* and the reference station is correctly noted. (Par. 34.) ✓
19. Junctions with contemporary surveys are adequate. *No other surveys in vicinity.*
20. Geographic names are shown on the sheet and are covered by the Descriptive report. (Par. 64, 66k.) ✓
21. The quality of the drafting is good. ✓ (Par. 31, 32, 33, 35, 36, 37, 38, 39, 40, 41, 42, 45, 46, 47, 48, 49, 50.)
22. No additional surveying is recommended. ✓
23. The Chief of Party inspected and approved the sheet and the descriptive report after review by

24. Remarks:

Reviewed in office by *R. J. Christman, June 6, 1933*

Examined and approved:

H. T. Adams
Chief, Section of Field Records

L. O. Robert
Chief, Division of Charts

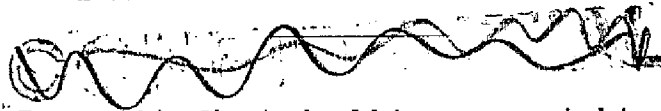
J. B. Borden
Chief, Section of Field Work

G. W. Wade
Chief, Division of Hyd. and Top.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO. 4684

TOPOGRAPHIC TITLE SHEET



The Topographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. B

REGISTER NO. 4684

State ~~Territory of Hawaiian Is.~~

General locality ~~Lisianski Island~~

Locality asc Lisianski Island

Scale 1-10000 Date of survey August, 1931

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

Chief of Party O. W. Swainson

Surveyed by C. J. Wagner

Inked by C. J. Wagner

Heights in feet above MHW to ground ~~to tops of trees~~

~~Contours~~, Approximate contour, ~~Remarks~~ interval 5 feet

Instructions dated February 10, 1930

Remarks: _____