

6654

U. S. COAST & GEODETIC SURVEY
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Form 504
Rev. April 1935
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Topographic
~~Hydrographic~~

Sheet No. T-6654

State S.W. ALASKA

LOCALITY

~~SOUTHWEST ALASKA~~

WEST SIDE SANAK ISLAND

LONG ISLAND & VICINITY

1938

CHIEF OF PARTY

Ray L. Schoppe

U. S. GOVERNMENT PRINTING OFFICE

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S. L.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO.

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. "P" 1938

REGISTER NO. T-6654 T6654

State S.W. ALASKA

General locality WEST SIDE OF SANAK ISLAND
SOUTHWEST ALASKA

Locality LONG ISLAND & VICINITY
West Side SANAK ISLAND

Scale 1:20,000 Date of survey June - July, 1938

Vessel U. S. C. & G. S. S. DISCOVERER

Chief of party Ray L. Schoppe

Surveyed by Ira T. Sanders

Inked by Ira T. Sanders

Heights in feet above MHW to ground to tops of trees

~~Contours~~ / ~~Approximate~~ / ~~contour~~ / Form line interval 100 feet

Instructions dated March 30, 1936; Supp. Instr., 16/
March 30, 1937.

Remarks: - - - - -

Project HT-208

South West

DESCRIPTIVE REPORT

to accompany

TOPOGRAPHIC SHEET FIELD LETTER "P" 1938

REGISTER NO. T - 6654

Scale 1: 20,000

WEST SIDE OF SANAK ISLAND

Southwest ALASKA

Ray L. Schoppe, Chief of Party

Season of 1938

DESCRIPTIVE REPORT

to accompany

TOPOGRAPHIC SHEET FIELD LETTER "P" 1938

REGISTER NO. T - 6654

WEST SIDE SANAK ISLAND

Southwest ALASKA

INSTRUCTIONS:

This work was done in accordance with the Director's Instructions dated March 30, 1936, Supplemental Instructions, dated March 30, 1937. ✓

LIMITS:

This sheet covers a portion of the west side of Sanak Island between North Latitudes $54^{\circ} 22'$ and $54^{\circ} 29'$. The survey includes LONG ISLAND, ✓ the TRINITY ISLANDS, and numerous offshore rocks and reefs adjacent to LONG and SANAK ISLANDS.

This sheet joins DISCOVERER'S Sheet Field Letter "O", Register No. T - 6608, 1937, along the cut between CLIFFORD and LONG ISLANDS and at North Latitude $54^{\circ} 24.8'$, West Longitude $162^{\circ} 46.7'$ on SANAK ISLAND. At the North this sheet joins sheet Register No. T - 6653 (Scale 1: 10,000) ✓ in the vicinity of Signal PAL. This signal is common to both sheets. For the offshore detail at the North the sheet joins sheet Register No. T - 6653 as indicated by pencil line and note on sheet. Pencil line and note removed.

CONTROL:

The work on this sheet was controlled by triangulation stations established or recovered by parties working from the Str. DISCOVERER during ✓ the 1936 season. The station positions are based on the Unalaska Datum, and the field computations are unadjusted.

SURVEY METHODS:

This work was done by a party operating from the Launch HELIANTHUS. ✓

The work on this sheet originated with a cut from Station NIG to a flag at elevation 76 (Latitude $54^{\circ} 24.4'$, Longitude $162^{\circ} 47.8'$). Using this cut as an orientation line the 3 point problem was solved at elevation 76. From this position a scheme of graphic triangulation was carried northwest-ward through the pass between LONG & SANAK ISLANDS and expanded to include the TRINITY ISLANDS, the shore of SANAK ISLAND north of the pass, and the high water rocks between. From elevation 76 a traverse was run southward to the tip of LONG ISLAND then along the outer shore of LONG ISLAND to Station LONG. There was no error, either in distance or azimuth. ✓

Standard plane table methods for locating details, signals, etc., were used throughout.

FORM LINES:

All elevations for form lines and the heights of the higher offshore rocks were determined by standard plane table methods. The heights of the smaller and lower offshore rocks were measured with the telemeter rod, which had been marked on the back side in feet before beginning the season's work. ✓

COMPARISON WITH PREVIOUS SURVEYS:

The plane table survey Register No. 2553, and Hydrographic survey Register No. 2556, made in 1901 are the only previous surveys of this area. That part of SANAK ISLAND covered by this sheet agrees fairly well with the 1901 surveys as to the general outline of the main features. The details differ so widely, that it is thought to be unnecessary to list them, as this survey is on a much larger scale and better controlled than the 1901 surveys. Bromide copies of the 1901 surveys were examined frequently as the work on this sheet was in progress, and the differences verified in the field. Par. 2, Rev.

The offshore detail west of SANAK ISLAND as shown on Chart 8860 differs considerably from that shown on the bromides of the 1901 surveys. Not so.

Cuts were taken to all rocks and breakers seen. Many of these rocks do not come on this sheet, therefore the cuts were left in pencil and are indexed below. These rocks were so far away that it was impossible to accurately show the details. It is thought that the cuts can be used in conjunction with hydrographic cuts for an accurate delineation of the details when this area is sounded. These cuts have been transferred to the boat sheet which will be used in this area. Rocks fall on H-6484

A breaker, indicated by the sunken rock symbol on Chart 8860, Latitude $54^{\circ} 23.6'$ North, and Longitude $162^{\circ} 55.6'$ West, was not seen. Falls on H-6484
This area is apparently quite foul and the rock may be found when this area is sounded.

A rock awash at MLLW was located at Latitude $54^{\circ} 23.2'$ North, Longitude $162^{\circ} 53.3'$ West. This is shown as a sunken rock on Chart 8860 at Latitude $54^{\circ} 23.0'$ North, Longitude $162^{\circ} 53.3'$ West. ✓

West Breaker, shown on Chart 8860 at Latitude $54^{\circ} 29.0'$ North, Longitude $162^{\circ} 59.5'$, was not seen at any time during the season. Will be considered on H-6484.

Cuts to breakers a mile or less offshore (left in pencil on sheet) are listed as follows: (1) one cut (j) from Station RILL to a breaker at Latitude $54^{\circ} 24.3'$ North, Longitude $162^{\circ} 51.7'$ West. This breaker was seen only once. 6 1/2 fms. on H-6437 (1938-39)

(2) One cut (k) from Station RILL to a breaker at Latitude $54^{\circ} 24.75'$ North, Longitude $162^{\circ} 51.2'$ West. This breaker was seen only once. 5 fms. on H-6437 (1938-39)

(3) Two cuts (l) from Stations RILL and LONG to a breaker at Latitude $54^{\circ} 25.3'$ North, Longitude $162^{\circ} 53.2'$ West. What is presumed to be this breaker is shown by the sunken rock symbol on Chart 8860 at--

Latitude 54° 25.4' North, Longitude 162° ^{53.0}~~52.8~~ West. This breaker was seen
3½ fms. on H-6437 (1938-39).
twice only.

Indications of rocks or shoal spots in the vicinity of these three
breakers are found on the hydrographic sheet ^{H-6437} covering this area, but until
the hydrographic development is completed their exact positions are not
known. <sup>Hydrographic development on H-6437 satisfactory in all 3 cases.
Penciled cuts and notes removed from present survey.</sup>

<u>Symbol</u>	<u>INDEX, CUTS IN PENCIL TO DISTANT ROCKS</u>
<u>a</u>	2 cuts to Rock awash MLLW, from FORD & LONG. This rock comes closest to charted position of ONEIDA ROCK.
<u>c</u>	2 cuts to Rock awash MLLW, from FORD & LONG.
<u>d</u>	2 cuts to Rock awash MLLW, from LONG & Elevation 92. South end of LONG ISLAND.
<u>e</u>	4 cuts to Rock bare 3 feet at MLLW, from FORD & Elevation 92, LONG & ☉ HI.
<u>f</u>	1 cut left tangent reef, from ☉ HI.
<u>g</u>	4 cuts to Rock bare 6 feet at MLLW, from ☉ OUT, FORD, LONG & ☉ HI.
<u>h</u>	1 cut, right tangent reef, from Elevation 92.
<u>o</u>	8 cuts to Reef bare 3 feet at MLLW from ☉ OUT, FORD, Elevation 92, LONG, ☉ HI & Elevation 50 by ☉ TAN.
<u>v</u>	6 cuts to single rock bare 8 feet at MLLW from ☉ OUT, FORD, Elevation 92, LONG, ☉ HI & Elevation 50. (Note: This rock was visible at all times, and can probably be used as a hydrographic signal.)
<u>△</u>	7 cuts to rock bare 3 feet at MLLW from ☉ OUT, FORD, Elevation 92, LONG, ☉ HI, and Elevation 50.
<u>b</u>	5 cuts to single breaker from FORD, Elevation 92, LONG, and Elevation 50. This rock is presumed to be HENNIG ROCK, shown on Chart 8860 at Latitude 54° 25.3' North, Longitude 162° 58.1' West.

Inspection of H-6484 (1938-39) before verification indicates that these rocks have been taken care of on that survey. The rocks will be disposed of finally by the reviewer of H-6484.

The heights given in the above index are estimated, and due to the distances away from the topographer may vary 2 or more feet.

GENERAL DESCRIPTION:

That part of SANAK ISLAND shown on this sheet is low and rolling with numerous small lakes. Grass grows luxuriantly down to the storm highwater line, except on occasional low rocky bluffs. Generally speaking, the shores are marked

with low but steep bluffs. TRINITY ISLANDS and those in the pass, are grass covered. LONG ISLAND is the largest island west of SANAK ISLAND, and is joined to it at low water. The pass between LONG ISLAND and CLIFFORD ISLAND also goes dry at low water.

Many of the Sanak Island cattle feed on Long Island, passing back and forth at low water.

TRINITY ISLANDS consists of the group of three largest islands northwest of LONG ISLAND. TROITZ ISLAND is the largest of the group, and is divided into three parts at storm highwater. The Northern portion is separated at ordinary high water.

The seaward shores of LONG ISLAND and the TRINITY ISLANDS are bounded by a strip of foul area, varying in width from two hundred meters to about 3/4 mile. Kelp grows profusely in and around this foul strip. The area between the TRINITY ISLANDS and SANAK ISLAND is filled with numerous rocks, reefs, and heavy kelp patches, making it exceedingly dangerous for vessels drawing 7 feet or more. During the field season the Launch HELIANTHUS made several trips from an anchorage just east of Signal FAT, through the open areas between kelp patches, passing about 400 meters to the westward of Signal PIP to a point abeam Signal TWIN, then bearing northeastward between kelp patches to bring Signal SON (Sheet Register T - 6653) on the port bow thence as directed in the report for Sheet T - 6653. This route was traversed two or three times when the sea outside this area was too rough for safety. No dangers were noticed along the route.

Fresh water is available on the seaward side of LONG ISLAND just north of Signal FUN, and at any of the other places where the small lakes discharge into the sea. There is a small shack near the south end of Long Island, which has a piped spring near by. There is a house, marked by Signal FLUE, with several out-buildings near the middle cut on TROITZ ISLAND. This

island is stocked with foxes, and is held under lease by John Holmberg, a half-breed, who lives with his family in a small shack on the south end of ENSENADA ISLAND.

The reef at Latitude $54^{\circ} 22.2'$ North, Longitude $162^{\circ} 48.5'$ West as viewed from the northwest or southeast appears as a solid mass. It is bounded by a foul area and heavy kelp which extend about 600 meters west of the northern end of the reef. This is the most prominent offshore reef in this vicinity.

SPECIAL NOTES:

- (1) On this sheet, offshore reefs which are awash at some stage of the tide are shown with the rock awash symbol, and the reef outlined with a dotted line. This was done in order to show the rodged high points on the reef. For an example see the reef at Latitude $54^{\circ} 27.8'$ North, Longitude $162^{\circ} 52.7'$ West. The reef is divided into 3 parts at low water, and is surrounded by a foul area as indicated by the dashed line.
- (2) Reefs or rocks with the legend "Awash at HW" are bare 5 to 6 feet at MLLW. Tides observed at Peterson Bay this season show a mean range of approximately 6 feet.
- (3) The low water line in the pass between LONG and SANAK ISLANDS was left in pencil on the sheet. This area being inaccessible by boat at low tide, was surveyed during periods of high water. No effort was made to rod the low water line on that account. However, the area was seen at low water several times during the season and the low water line sketched as shown. It was the intention of the Chief of Party to have two or three sounding lines run through the pass, but lack of opportunity prevented that. This will no doubt be done next season when the Hydrography is completed in this vicinity.
*Not accomplished on H-6437.
Not important.
Sketched L.W. inked.*
- (4) A comparison with the smooth Hydrographic sheet covering this area disclosed the fact that rocks not seen by the topographer in four different

T 6654

locations have been located by the Hydrographers ^{on H-6437.} All of these rocks were found adjacent to areas indicated on the Topographic sheet as "foul". None of them are visible except at or near the times of Low Water. ✓

These rocks have been left in pencil on the topographic sheet, and are listed as follows: ^{Penciled rocks removed from present survey.}

- (1) Two rocks awash at MLLW, 700 meters (approx.) westward of Sig. OUT.
- (2) Two rocks awash at MLLW, 250 meters (approx.) southward of Sig. MIS. ✓
- (3) One rock awash at MLLW, 400 meters (approx) southwestward of Sig. HANK.
- (4) One rock bare 1 foot at MLLW, 500 meters (approx.) northwestward of Sig. PIP.

MAGNETIC OBSERVATIONS:

Magnetic observations with the declinoire were made at Station LONG. A magnetic declination of $17^{\circ} 14'$ East was noted. The declinoire used was Standardized at the Green Lake Magnetic Station, Seattle, Washington, before beginning the season's work. Declination normal. ✓

GEOGRAPHIC NAMES:

Names used on 1901 Surveys:

SANAK ISLAND, CLIFFORD ISLAND and LONG ISLAND. The last two names apply to the same island, which is designated LONG ISLAND on this sheet. According to Lieut. E. B. Lewey's report on Sheet Field Letter "O", Register No. T - 6608, 1937, the island is known locally as LONG ISLAND. It is also called LONG ID. on Survey Register No. 2556. On the other hand, information obtained from residents at Sanak Harbor, indicates that both names are used, with a slight preference for CLIFFORD. ✓

Names used in Alaska Coast Pilot, part II, page 260:

TRINITY ISLANDS, TROITZ ISLAND. TROITZ is the name this island is called locally. The name TRINITY ISLANDS was not heard among the residents. So far as could be learned, they have no local name for this group. This name, however, is shown on Sheet Register No. 2556. ✓

New Names:

SIMCILLA ISLAND and ENSENADA ISLAND are names used locally. The first is applied to the northern-most one of the TRINITY group. It is a name of native origin, but (at present) unknown meaning. The second is applied to that island lying north of the entrance to the dry pass between SANAK and LONG ISLANDS. This name is of Spanish origin, and no one knew how it came to be used locally.

The smallest island of the TRINITY group has no name. ✓

APPROVED:

Ray L. Schoppe
Ray L. Schoppe,
H. & G. Engineer,
Chief of Party.

Respectfully Submitted,

Ira T. Sanders
Ira T. Sanders,
Jr. H. & G. Engineer,
Ship DISCOVERER.

FORWARDED:

G. C. Jones
G. C. Jones,
H. & G. Engineer,
Commanding DISCOVERER.

STATISTICS

to accompany

TOPOGRAPHIC SHEET FIELD LETTER "P" 1938

REGISTER NO. T - 6654

Number of statute miles of shore line-	- - - - -	-33.5
Area surveyed in square statute miles-	- - - - -	-45
Number of elevations determined-	- - - - -	-133

MAGNETIC NOTE

The magnetic declination at the Green Lake Magnetic Station, Seattle, Washington, was observed with the Declinatoire used on this sheet, on April 8, 1938. The index error was found to be zero.

This error was not checked in the Fall, as observations at Green Lake in October by Lieutenant Pfau indicated local attraction at that Station. The declinatoire used on this sheet is part of the equipment for alidade No. 187. This alidade was returned to the Washington Office on November 4, 1938, which was prior to the establishment of the new Magnetic Station at Lincoln Park.

T-6654

Remarks.

Decisions

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GEOGRAPHIC NAMES

Survey No. T-6654

GEOGRAPHIC NAMES										
Survey No. T-6654										
Name on Survey										
	On Chart No.	On previous survey No.	On U. S. quadrangle Maps	From local information	On local Maps	P. O. Guide or Map	Rand McNally Atlas	U. S. Light List		
A,	B,	C,	D	E	F	G	H	K		
<u>Sanak Island</u>										1
<u>Pacific Ocean</u>										2
<u>Long Island</u>										3
<u>Clifford Island</u>										4
<u>Trinity Islands</u>										5
<u>Simcilla Island</u>										6
<u>Troitz Island</u>										7
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U. S. GEOGRAPHIC NAMES
 L. HECK 6/24/38

MEMORANDUM

IMMEDIATE ATTENTION

SURVEY
 DESCRIPTIVE REPORT } ~~xxxxxx~~
~~PHOTOGRAPH~~ } No. T-6654

{ received May 3, 1939
 { registered June 17, 1939
 { verified
 { reviewed
 { approved

This is forwarded in order that your attention may be directed to the matters as indicated below. Please initial in column 3 as an acknowledgement that your attention has been thus directed. The complete original records are available if desired. If you cannot give this your immediate attention, please initial, note, and forward to the next section marked, calling for the records at your convenience.

ROUTE		Initial	Attention called to
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RETURN TO

82	T. B. Reed
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✓ JBR

DIVISION OF CHARTS

Section of Field Records

REVIEW OF TOPOGRAPHIC SURVEY NO. 6654 (1938) FIELD NO. P-1938

S. W. Alaska, West Side of Sanak Island;
Long Island and Vicinity
Surveyed in June - July 1938, Scale 1:20,000
Instructions dated March 30, 1936; March 30, 1937
(DISCOVERER)

Plane Table Survey

Aluminum Mounted

Chief of Party - R. L. Schoppe.
Surveyed and inked by - I. T. Sanders.
Reviewed by - J. A. McCormick, September 10, 1940.
Inspected by - H. R. Edmonston.

1. Junctions with Contemporary Surveys.

Junctions were made with T-6653 (1938) on the north, T-6650 (1937-38) on the northeast and T-6608 (1937) on the east. All are satisfactory.

2. Comparison with Prior Surveys.

T-2553 (1901) 1:40,000.

A close comparison of T-2553 with the present survey shows the former to be little more than a good reconnaissance. In some places the two surveys are in excellent agreement but in others the differences in position of what cannot be other than identical detail amount to as much as 500 meters. It is entirely possible that the present survey may have missed some rocks in the fouler areas but the probable error in position of such detail on T-2553 precludes carrying forward any part of it particularly as similar detail usually is to be found on the present survey within the limits of such probable error. The present survey supersedes T-2553 in the common area.

3. Comparison with Chart 8860 (New Print of July 13, 1939).

Topographic detail charted in the area covered by the present survey is from T-2553 (1901), discussed in the preceding paragraph.

4. Condition of Survey.

Penciled cuts to rocks outside the limits of the survey have been left intact for consideration by the verifier and reviewer of H-6484 (1938-39), the hydrographic survey covering the area involved.

5. Compliance with Instructions for the Project.

Satisfactory.

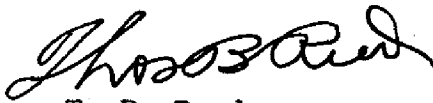
6. Additional Field Work Recommended.

None.

7. Superseded Surveys.

T-2553 in part.

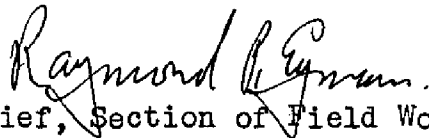
Examined and approved:



T. B. Reed,
Chief, Section of Field Records.



Chief, Division of Charts.



Chief, Section of Field Work.



Chief, Division of H. & T.