

4347

4347

Form 504	
DEPARTMENT OF COMMERCE	
U. S. COAST AND GEODETIC SURVEY	
....., Director	
<div>U. S. S. S. S. S. L. A. A. Mar. 31, 1928 Acc. No.</div>	
State: SE. Alaska	
DESCRIPTIVE REPORT	
Topographic Hydrographic	Sheet No. 4347
LOCALITY	
San Alberto Bay	
Klawak Inlet	
1927	
CHIEF OF PARTY	
H. A. Cotton	

DESCRIPTIVE REPORT

to accompany

TOPOGRAPHIC SHEET NO. 4347

(Field Letter "F")

KLAWACK INLET

to

BIG SALT LAKE

SOUTH EAST ALASKA

April - May, 1927.

Scale 1:10,000

AUTHORITY:

The topography was executed in accordance with instructions of Feb. 18, 1927 to the Commanding Officer of the Steamer EXPLORER.

LIMITS:

This sheet includes the survey of the head of Klawack Inlet, the approaches to Big Salt Lake, and the south east end of Big Salt Lake. The limits of the sheet are: Latitude 55 33' on it's south end and 55 39' on the north. The longitude limits are 133 03' and 133 09'. Junction is formed with sheet "E" on the west side at stations A LAKE and O END, and with sheet "G" on the east side at stations A DAY and A GRED.

CONTROL:

Control for this survey was furnished by a system of triangulation based on recovered stations A SEPT and A APAT, and established by the party during the season. It was not feasible to carry the triangulation thru the entrances to Big Salt Lake by the usual methods. At the south entrance the lines A ^{LAST} ~~LAD~~ to A LAKE and A LAKE to A SMITH were measured by a stadia traverse and the angles measured with the theodolite. From the base A LAKE to A SMITH a system of triangulation was carried up to the head of the lake. A TUT was included in this system. A traverse was also carried thru the north entrance over the lines A FALL to A RAPID and A RAPID to A TUT. The traverse position of "TUT" checking the triangulation position of that station.

ELEVATIONS:

Elevations are in feet above high water and were taken to the tops of the trees. The crests of the hills shown on this sheet are wooded except for portions of the tops of the mountain at the north end of the sheet.

A subplan showing the form lines of the slope of the mountain at the north east edge of the sheet is submitted with this report. The subplan

was made so as to form a junction with sheets "F" and "G", and can be attached to the edge of the sheet to show the continuation of the form lines at that point.

Elevations of the more important high water rocks are indicated on the sheet by a red numeral in parenthesis, and are expressed in feet above high water.

The mountain at the north end of the survey and the one on the east side are generally regular in slope with few outstanding points from which to obtain elevations except at the crests.

METHODS:

The planetable and stadia method was used for this survey. Over nearly all of this work control was obtained by three point fix positions on triangulation stations, and on signals located by planetable intersections from triangulation stations. In some cases it was necessary to traverse for short distances, but the traverse lines checked in on established stations so as to require no adjustment.

As far as possible the low water line was rodded in as the work progressed. Those sections of the low water which, because of the stage of the tide, were not located with the planetable were later located by sextant angles and plotted on the sheet. The use of the sextant for this purpose saved considerable time.

CONNECTION WITH PREVIOUS SURVEY:

That portion of the shore line in this locality which was previously surveyed is shown on this sheet in pencil. Good connections with the previous survey were obtained as indicated on the sheet.

A resurvey was made of the buildings along the water front at Klawask as there has been considerable change since the previous survey in 1914.

The shore line along the water front was not resurveyed as no change of importance was apparent.

In order that the form lines on this sheet might be shown completely they were sketched over part of the section included in the previous survey.

The form lines for the range of hills about one and three quarters miles west of Klawack differ somewhat from those of the previous survey.

DESCRIPTION OF SHORE LINE:

The shore line is generally composed of either rock ledge or loose rocks and boulders. The trees make down nearly to high water and the rise of the ground from the beach is gradual.

In inking the low water areas, sand, gravel and loose rocks, and mud were indicated by the corresponding symbols. Rock ledge was indicated either by the prescribed symbol or by a plain black dotted line. The dotted line was used to indicate rock ledge where the symbol would tend to obscure important features or to detract from the distinctiveness of the high water line.

DESCRIPTION OF COUNTRY AND NOTES FOR NAVIGATION:

The country back from the beach is heavily wooded and mountainous to the east and north.

The long hogback mountain shown on the north end of this sheet is the most prominent object in the immediate vicinity. It shows clearly from San Alberto Bay and marks the position of Big Salt Lake.

The approaches to the entrances to the lake are restricted and care must be taken to avoid rocks and low water flats as shown on the sheet.

The following is a description of the entrances to the lake and of the prevailing tidal conditions:

The low water level of Big Salt Lake is about five feet higher than the mean lower low on the outside. For this reason water runs out of the

lake for some time after the low on the outside, and runs into the lake for some time after the high on the outside. The low water slack in the lake comes from about three to four hours before the high water slack on the outside. The high water slack in the lake comes from about one and one half to two hours after the high water slack on the outside. (Tidal conditions are explained in detail in the report on tide observations in this locality).

The difference in water levels combined with the narrow passages thru which the water must flow in and out of the lake causes very strong currents to prevail except on the slack waters.

Passage into the lake must be made at the high or low water slack at the entrance. The high water slack is preferable for either entrance, and its time can be computed by adding about one and one half hours to the time of high water at Craig.

At the south entrance the fall of 5 feet between levels occurs in a distance of about one half mile. This entrance is very restricted due to rocks and loose boulders which are liable to change position, because of the prevailing strong currents. It is very difficult to follow the channel and is advisable to obtain a guide from Klawak when making the passage for the first time.

The north entrance is preferable and by careful study of the chart can probably be made without difficulty. At this entrance the drop between levels occurs suddenly, there being a ledge at the entrance which forms a cataract when the tide is running. Passage is not possible except at the slack water and should not be attempted at any other stage of the tide.

The north passage is marked by an arrow on the sheet. This passage is narrow, but is clear and short, with about eight feet of water at the low

slack. The passage is marked naturally by a small lone clump of trees on the rocks just to its right when facing in towards the lake.

The entrance to the Small Salt Lake just west of station A TE and about two miles north of Klawack is too shallow to admit passage for anything except canoes and skiffs.

RECOVERABLE PLANETABLE POSITIONS

Object and Description	Latitude & Longitude	Seconds in Meters	Height in Feet	Remarks
1. Beacon--The red lighted beacon at the entrance to Klawak Harbor	55 33' 133 06'	660 199	About 12 ft. above the ground.	The beacon has a fixed red light.
2. Beacon (white).	55 33' 133 06'	600 58		The beacon, a piling with white target at the top, stands on the east side at the north end of Klawak Harbor.
3. Beacon (black)	55 33' 133 06'	80 99		The beacon, a piling with black target at the top, stands at the south end and east side of Klawak Harbor.
4. TOP--a spruce tree with the top trimmed down for about ten feet.	55 33' 133 05'	1396 491	About 60 ft.	This is the highest tree and is about at the center of the island.
5. OX--center of top of High Water Rock.	55 35' 133 09'	1507 55	3	In the group of rocks at this point this is the only one standing well above High Water.
6. TOP--Center of top of High Water Rock.	55 35' 133 08'	1457 481	4	Largest rock in the group and on the extreme west end of the group of rocks at this point.
7. BY--Top of a high water rock.	55 36' 133 07'	502 753	6	The top of a high water rock standing just off the N-E end of the small island at this point.
8. ROD--Center of top of small high water rock.	55 36' 133 05'	1092 280	2	Rock stands about 300 m. east of A RAPID.
9. IKE--Center of top of high water rock.	55 36' 133 05'	612 163	3	Signal is at highest point of the rock.

F

RECOVERABLE PLANETABLE POSITIONS
(continued)


Object and Description	Latitude & Longitude	Seconds in Meters	Height	Remarks
10. ^L ZONE--Highest point on high water rock.	55 36' 133 04'	1270 627	3	The highest point of the largest of this group of rocks.
11. OM--Top of a high water rock.	55 36' 133 03'	1470 776	3	The highest point on a small high water rock.

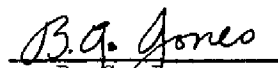
STATISTICS

Statute miles shoreline--high water	62.0
--low water	22.0
Area square statute miles	27.9
Number of elevations (Also 8 rocks)	35
Number of recoverable stations, triangulation	35
planetable	11
Positions occupied	113

Examined, approved and forwarded.

Respectfully submitted.


Harold A. Cotton,
Commanding Officer,
U.S.C. & G.S.S. EXPLORER.


B.G. Jones,
Jr. R. & G. E.,
C. & G. Survey.

IN REPLY ADDRESS THE DIRECTOR
U. S. COAST AND GEODETIC SURVEY
AND NOT THE SIGNER OF THIS LETTER

AND REFER TO No. 11-DEM

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

WASHINGTON

July 27, 1928.

SECTION OF FIELD RECORDS

Report on Topographic Sheet No. 4347

Klawak Inlet, Alaska

Surveyed in 1927

Instructions dated February 18, 1927

Chief of Party, H. A. Cotton.

Surveyed and inked by B. G. Jones.

1. The records as well as the plan and character of the survey conform to the requirements of the General Instructions, except for the inclusion of unnecessary intermediate form lines.
2. The character and extent of the survey satisfy the specific instructions.
3. The sheet contains about 15 small ink spots in the water areas that look like dry rocks. They are evidently splashes from the pen and photographs of the sheet have been sent to the EXPLORER for explanation.
4. The junctions with the adjoining surveys are adequate, and no further surveying is required.
5. The character and scope of the surveying are excellent and the field drafting is good.
6. Reviewed by E. P. Ellis, July, 1928.

Approved:

Chief, Section of Field Records (Charts)

Chief, Section of Field Work (H. & T.)

POST-OFFICE ADDRESS: 202 Burke Building, Seattle, Washington.

TELEGRAPH ADDRESS:

EXPRESS OFFICE:

AUG 23 11 15 AM '28

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DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

U.S.C. & G.S.S. EXPLORER

August 10, 1928.

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

Through: Inspector, U. S. Coast and Geodetic Survey,
Seattle, Washington.

From: Commanding Officer, U.S.C. & G.S.S. EXPLORER,
Sitka, Alaska.

Subject: Topographic Sheet No. 4347.

Receipt is acknowledged of your letter of July 23 on the above subject relative to certain black spots on this topographic sheet.

The topography on this sheet was executed by Lieut. (j.g.) B. G. Jones, who is still attached to the EXPLORER. The photostat copies of the sheet have been carefully examined by Lieut. Jones and with one exception he is positive that all these black spots are ink spots which were not thoroughly cleaned from the sheet.

The one exception is the spot about 100 meters WNW of Signal OX near the center of the left hand edge of the sheet. He believes this spot also is nothing but an ink spot, but suggests examining the hydrographic sheet for verification. If shown on the hydrographic sheet, the mark should be retained as an islet, but otherwise considered as non-existent.

It is suggested that the hydrographic sheet be examined for all of these spots. As Lieut. Jones himself transferred the shoreline, etc. to this sheet, it is quite likely that these details as transferred are a correct copy of the topographic work.

An examination of these photostat copies of sheet 4347 show several instances of intermediate form lines without elevations--the same omission that Lieut. Jones made on Topographic Sheet 4330 regarding which a supplemental Descriptive Report was recently prepared and submitted. It is respectfully requested that a photostat or bromide copy of the complete sheet (#4347) be for-

warded to the EXPLORER, so that these apparent errors of form lines
can be properly explained. //

Lieut. Jones further requests that a photostat or
bromide copy of both sheet #4330 and #4347 be furnished him for
his personal use.

Harold A. Cotton
Harold A. Cotton,
Commanding Officer,
U.S.C. & G.S.S. EXPLORER.

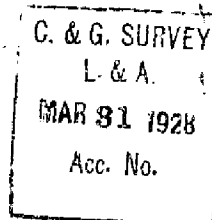
*Not forwarded. All intermediate or
auxiliary form lines should be removed.
AMS.*

Done

EAC.

Sep. 5, 1928

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY



REG. NO. 4347

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"

REGISTER NO. 4347

State SE. ALASKA

General locality SOUTH EASTERN ALASKA San Alberto Bay

Locality Klawak Inlet
~~SAN ALBERTO BAY, Klawak Inlet~~

Scale 1:10,000 Date of survey April, May, 1927.

Vessel U.S.C. & G.S.S. EXPLORER.

Chief of Party Harold A. Cotton

Surveyed by B. G. Jones

Inked by B. G. Jones

Heights in feet above H. W. to ground to tops of trees

Contours Approximate contours Form line interval 100 feet

Instructions dated February 18, 1927.

Remarks: