

4827

Diag. Cht. No 8502-2 & 8552

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4827

Form 504

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

State: Alaska

11-5613

DESCRIPTIVE REPORT.

Hydrographic Sheet No. 9 **4827**

LOCALITY:

Resurrection Bay

Lowell Pt. to Caines Head

1928

CHIEF OF PARTY:

R. R. Jenkins

Note by Chief of Party:

The purpose of this sheet was to fill in blank or poorly developed areas on hydrographic sheet No. 2761 surveyed in 1905.

In the area just southeast from Lowell Point, the sheet shows rocky bottom. It is believed that this is not the case. I find that the hydrographic party was in the habit of calling the bottom rocky when the lead came up clean. The bottom here is of the fine glacial silt and easily washes off the lead. Sheet No. 2761 shows soft bottom in this area and it is my belief that it is correct. After this came to my attention, all parties were instructed to record the bottom as rocky only when there were some visible signs such as abrasions on the lead or small pieces of rock on the lead.

A meandering stream enters the bay just south of trian. station "Brad". This stream is changeable and its present position was sketched in. There is indication that during the winter gales, the sea sweeps over a large part of the flat here and causes many changes.

ANCHORAGES The area southeast of Lowell Point is sometimes used as an anchorage, but it is doubtful whether or not it has any advantages over the anchorage off Seward at the head of the bay. Both are very deep and close to the beach. Halibut boats equipped with deep sea anchoring gear sometimes anchor just north of Lowell Point where they get some lee from the prevailing southerly summer gales.

The nearest protected anchorage is in THUMB COVE on the east side of Resurrection Bay.

The topographic sheet on which the signals were located was used as a smooth sheet for the hydrography.

R. R. Lukens
R. R. Lukens.

DESCRIPTIVE REPORT

to accompany

Hydrographic Sheet No.9, Lowell Pt. to Caines Head, Resurrection Bay,
S.W. Alaska.

Str. SURVEYOR

R.R. Lukens, Chief of Party

Director's instructions dated June 14, 1928.

EXTENT:

This sheet covers the inshore survey of the west side of Resurrection Bay from Lowell Pt. to Latitude $60^{\circ} 02'$ and six lines of soundings north of Caines Head.

GENERAL DESCRIPTION:

The west shore of Resurrection Bay is rocky and, except for the three valleys which extend westward, the coast line rises abruptly from the water's edge. The valleys are covered with a growth of spruce trees and the hills support a growth of shrubs and grass. The shoreline at the mouths of the valleys is composed of small waterworn boulders.

SURVEY METHODS:

All soundings were taken from the SURVEYOR'S 30 ft. launch #4, which was equipped with a sounding machine driven by a shaft connected to the launch engine. The sounding wire was led over a sheave which was placed directly above the drum of the sounding machine. The wire led from the sheave over another sheave placed on the outboard end of boom on the starboard quarter. A ~~15~~ 10 lb. lead was used for machine soundings. During the course of the work the registering sheave was tested for zero each time the lead was hauled in for a bottom sample. It was found that the sheave was seldom in error more than 1 foot when the bottom of the lead was at the water's surface and when necessary the proper correction was applied before the sounding was recorded. In depths of less than 15 fathoms hand lead soundings were taken, and in greater depths the machine was used.

The three triangulation stations shown were recovered and used for topographic control. The topography was done on this same sheet, and signals only were located. A plane table traverse was run from triangulation station SAND to topographic station SOLD and back again to SAND, closing with an error of 2 meters so that no adjustment was necessary. A traverse was also run from SAND to triangulation station BRAD checking with a closing error of 4 meters. These two traverses were run by J.C. Partington. A traverse was run from triangulation station TURN to BRAD checking well within the required limit of error. This traverse was run by P.A. Smith. No adjustment was necessary on any of these traverses. The shoreline was estimated as the signals were located and is shown as a dotted line.

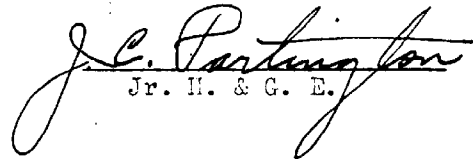
GENERAL DEPTHS and SHOALS:

A shoal extends a short distance off Lowell Pt. and a more extensive shoal extends about one-quarter of a mile offshore from signal RUN. The latter shoal is flat and composed of sand and gravel. Except for these two shoals, deep water extends close to shore. The water shoals rapidly as the shore is approached and the bottom is mostly rock. No inshore or offshore reefs were found.

Statistics

Date	Day	Volume	Positions	Soundings	Miles	Boat
Sept. 29, 1928	a	1	104	388	14.0	Launch #4

Respectfully submitted,


Jr. H. & G. E.

Approved and forwarded,



Chief of Party

Feb. 26, 1939.

Division of Hydrography and Topography:

Division of Charts:

Tide Reducers are approved in
1 volume of sounding records for

HYDROGRAPHIC SHEET 4837

Locality: Resurrection Bay, S. W. Alaska.

Chief of Party: R. R. Lukens in 1938

Plane of reference is Mean lower low water, reading
2.6 ft. on tide staff at Seward, Alaska
~~XXXXXXXXXXXXXX~~

Condition of records satisfactory except as checked below:

1. Locality and sublocality of survey omitted.
2. Month and day of month omitted.
3. Time meridian not given at beginning of day's work.
4. Time (whether A.M. or P.M.) not given at beginning of day's work.
5. Soundings (whether in feet or fathoms) not clearly shown in record.
6. Leadline correction entered in wrong column.
7. Field reductions entered in "Office" column.
8. Location of tide gauge not given at beginning of day's work.
9. Leadline corrections not clearly stated.
10. Kind of sounding tube used not stated.
11. Sounding tube No. entered in column of "Soundings" instead of "Remarks".
12. Legibility of record could be improved.
13. Remarks.

[Paul C. Whitney

Chief, Division of Tides and Currents.

MARCH 18, 1929.

REPORT ON HYDROGRAPHIC SHEET # 4827

RESURRECTION BAY, ALASKA.

SURVEYED IN 1928.

CHIEF OF PARTY - R. R. LUKENS

SURVEYED BY J. C. PARTINGTON & P. A. SMITH.

PROTRACTED & SOUNDINGS PLOTTED BY J. C. PARTINGTON.

VERIFIED & INKED BY W. H. BAMFORD.

1. The records were found to conform to the requirements of the General Instructions.
2. The plan and character of development fulfill the requirements of the General Instructions.
3. The plan and extent of development satisfies the specific instructions except that the hydrographic sheet was made on a scale of 1:10,000 instead of 1:20,000 as suggested in the supplemental instructions, dated June 14, 1928.
5. It was possible to draw the usual depth curves completely, except in locations where soundings taken showed the abrupt end of a shoal, in which case some of the depth curves were partially or entirely omitted.

6. The field plotting was completed to the extent prescribed in the General Instructions.
7. The spacing of the soundings was poor close to the shore and necessitated replotting.
8. The junction with the adjacent sheet H-4678 was satisfactory.
9. There is only one contemporary survey adjoining this subject, which is on Hydrographic sheet # H-4678, and joins this subject in the vicinity of Lowell Point.
10. The Topographic sheet on which the signals were located was used as a smooth sheet for the hydrography therefore the triangulation ^{stations} and the signals were not checked by the office draftsman.
11. The sheet was very clean and the work legible.

W. H. Bawford

Section of Field Records
Report on Hyd. Sheet No. 4827
Resurrection Bay
Surveyed in 1928.

Instructions dated June 14, 1928 (Surveyor)

Chief of Party - R. R. Lukens
Surveyed by - J. C. Partington and P. A. Smith
Protracted and plotted by - J. C. Partington
Verified and inked by - H. H. Bamford

1. The records conform to the requirements.
2. The plan and character of the development fulfill the requirements of the General Instructions.
3. The plan and extent of the survey satisfies the specific instructions with the following exceptions.

Radical changes in the shoreline are noted in the vicinity of triangulation station "Brad". This was not surveyed.

Instructions called for a scale of 1:20,000 for this work.

4. No cross lines were run.
5. The information is sufficient for drawing the usual depth curves.

6. The junction with H. 4678, which is the only contemporary survey is satisfactory. Comparison with H. 2761, the old survey, shows that the soundings agree fairly well. The sounding line, which ends at pos. 78a, might have been extended a little further east in order to check the 68* fathom sounding on H. 2761, which is well outside the hundred fathom curve.
7. All rocky bottom characteristics, southeast from Lowell Point, have been removed from the sheet as recommended by the Chief of Party (See note in ^{Descrip} Report)
8. The usual amount of field plotting was done by the field party and was satisfactory except for the spacing of inshore soundings.
9. Reviewed by R.L. Johnston March, 1929.

* This sounding was checked from the original record and appears to be OK.

Unsatisfactory for charting purposes, because this survey indicates changes in old topography + no data for making the changes. A.M. Sobushalaki

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO.
4827

HYDROGRAPHIC TITLE SHEET

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

Field No. 9

REGISTER NO. 4827

State Alaska

General locality Resurrection Bay

Locality Lowell Pt. to Caines Head

Scale 1:10,000 Date of survey October, 1928

Vessel SURVEYOR

Chief of Party R.R. Inkens

Surveyed by J.C. Partington and P.A. Smith

Protracted by J.C. Partington

Soundings penciled by J.C. Partington

Soundings in fathoms feet

Plane of reference Mean lower low water

Subdivision of wire dragged areas by

Inked by

Verified by

Instructions dated June 14, 1928

Remarks:

Field Records Section (Charts)

HYDROGRAPHIC SHEET No. 4827

The following statistics will be submitted with the cartographer's report on the sheet:

Number of positions on sheet 104 . .
Number of positions checked 70 . .
Number of positions revised 3 . .
Number of soundings recorded 388 . .
Number of soundings revised 26 . .
Number of signals erroneously
plotted or transferred

Date: 3-18-29
Cartographer: W. H. Bamford