

6927

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Form 504

U. S. COAST AND GEODETIC SURVEY  
DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. 4143 Office No. 6927

LOCALITY

State Alaska  
General locality South Side of Alaska Peninsula  
Locality Cape Wolstoi to Swedania Point

1943

CHIEF OF PARTY

L. C. Wilder

Surveyor

LIBRARY & ARCHIVES

DATE

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

REG. NO. **H6827**<sup>9</sup>

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. **4143**

REGISTER NO.

State **Alaska**

General locality **South <sup>side</sup> Alaska Peninsula**

Locality **Cape Tolstoi to Swedania Point**

Scale **1:40,000** Date of survey **Sept. 15 to October 1**, 19**43**

Vessel **SURVEYOR**

Chief of Party **L. G. Wilder**

Surveyed by **L. S. Hubbard, W. F. Malnate, H. S. Cole**

Protracted by **W. M. Martin**

Soundings penciled by **W. M. Martin**

Soundings in ~~fathoms~~ **XXXX** ~~feet~~ **fathoms**

Plane of reference **MLLW**

Subdivision of wire dragged areas by

Inked by **A. R. STIRNI**

Verified by **A. R. STIRNI**

Instructions dated **Instructions were oral.**, 19

Orders dated **Aug. 16, 1943**, issued by **Casper M. Durgin, Lt. Comdr. C. & G. S. Liaison Officer.**

Remarks:

**Smooth Sheet and Plotting by Seattle Processing Office.**

Sheet No. 4143 (Field)

South Side Alaska Peninsula  
Cape Tolstoi to Swedania Point

TIDAL NOTE

To Accompany

HYDROGRAPHIC SHEET, FIELD NO. 4143

The tide gage at Sand Point was used for the reduction of all soundings.

The plane of mean lower low water corresponds to a reading of 3.7 feet on the tide staff.

Highest Tide - 11.2 feet on Sept. 16, 1943

Lowest Tide - 3.4 feet on Sept. 16, 1943

Sand Point tides were used without time correction and without height correction.

Authority: Director's letter, 36-mlh, dated October 22, 1943.

~~POST~~ OFFICE ADDRESS:

G O P Y

TELEGRAPH ADDRESS:

EXPRESS ADDRESS:

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY  
WASHINGTON 25

October 22, 1943.

To: The Commanding Officer,  
U. S. C. & G. S. Ship SURVEYOR,  
400 Insurance Building,  
Seattle 4, Washington.

From: The Director,  
U. S. Coast and Geodetic Survey.

Subject: Tide Data, Alaska.

Reference is made to your letter of October 8, 1943, forwarding tide records for Sand Point, Popof Island and requesting data for the reduction of soundings.

The plane of mean lower low water as determined from these records by comparison with King Cove corresponds to a reading of 3.7 feet on tide staff at Sand Point.

Sand Point tides can be used for all hydrographic sheets without time correction and without height correction for sheets 4143 and 121-43. To allow for the increased tidal range northeastward from the Shumagin Islands, range factors of 1.3 and 1.6 should be used with Sand Point tides to obtain tide reducers for sheets 122-43 and 123-43.

(Signed) J.H. HAWLEY

Acting Director.

copy made for Processing Officer, Seattle and  
Supervisor, NW District



copy - - 195.

NOTES FOR DESCRIPTIVE REPORT TO ACCOMPANY HYDROGRAPHIC SURVEY NO. 4143

SHIP SURVEYOR

L. C. WILLER, COMDG.

INSTRUCTIONS

This work was executed under orders dated August 16, 1943, issued by Casper M. Durgin, Lieut. Comdr., C.&G.S., Liaison Officer. The instructions were verbal.

SURVEY METHODS

Standard visual fix hydrography was used throughout. Soundings were taken by Portable Depth Recorders, Type 808A and the Dorsey III fathometer. Fathometer corrections are covered in a special report. A copy of the final fathometer corrections is included in this report.

CONTROL

Since time was a limiting factor in completing this survey, no signal building was done. Peaks and other natural objects, located either by previous triangulation or by sextant cuts, were used for hydrographic control.

Signal "Head" - (West Head - Unga Island) is the same signal used on the wire drag survey - Approaches to Popof Strait, 1941. For field plotting, the position was spotted from the shoreline on the bromide of Survey H-3574. (1943)

REMARKS

The instructions specified that this work be of a reconnaissance nature. With the exception of additional development and closer spacing of lines the work completed is of standard accuracy. In cutting in some of the signals on the boat sheet intersections were only fair but may show improvement on the smooth sheet. Minor "jumps" were experienced in a few cases in changing fixes.

STATISTICS

471.3 statute miles.

755 positions

125 square statute miles.

(signed)

*L. C. Willer*

L. C. WILLER

Commanding, Ship SURVEYOR

Sheet No. 4143 (Field)

South Side Alaska Peninsula

Cape Tolstoi to Swedania Pt.

Seattle Processing Office Notes

CONTROL:

The hydrographic signals have been carefully plotted and checked.

The intersections for signal Seal gave two points. The southeastern was used, for it seemed to give the best results and agreed more closely with the selection of the field party. The other point may be seen just inside the circle to northwest of the point used.

There is a recorded cut on Highest Point of Ukolnoi Island. There are two other unrecorded cuts plotted on the boat sheet. From the Washington Office we received this position:

Ukolnoi Island, highest point - 1911

|               |          |
|---------------|----------|
| 55° 14' 33.64 | (815.2)  |
| 161 35 50.78  | (1040.3) |
|               | (162.9)  |
|               | 897.3    |

*Cuts in records of  
H-3654(1913-14) also check  
1911 position*

This position very closely checks the intersection on the boat sheet, but is 800 meters northeast of the point used by the field party.

The charted misplacement of the highest point of Ukolnoi Island was reported to the Washington Office and receipt acknowledged.

Signal West Head is the same as a signal used by the EXPLORER in 1941 in a survey of Popof Strait. The only such signal in this vicinity is the fourth order signal Win 1941. The signal was redressed by the men who built it in 1941, but they named it on this sheet for the geographic feature on which it stands.

Attention is called to the following soundings:

| Lat. & Long.                      | Position               | Fathoms               |
|-----------------------------------|------------------------|-----------------------|
| 55 <sup>0</sup> 19.18<br>161 23.6 | 42 G                   | 15 ✓                  |
| 55 23.1<br>161 03.0               | 74-75 c                | 4 4/6 ✓ 83            |
| 55 24.8<br>160 45.5               | 28- <sup>29</sup> 29 b | 5 4/6 ✓               |
| 55 25.0<br>160 44.9               | 27-28 b                | 5<br><del>5 1/6</del> |

The 10 fathom spot on Chart 8704 at Latitude 55° 21.15 Longitude 161° 01.7 was not found on this survey, the depths being 16 fathoms, shoaling gradually to northwestward. ✓

Differences at Crossings:

| Lat. & Long.                       | Position           | Depth   |
|------------------------------------|--------------------|---|
| 55 <sup>0</sup> 19.35<br>161 24.00 | 58-59 E<br>37-38 G | 20-20 fms.<br>23-25 fms. <i>steep slope - shoaler<br/>sides plotted</i> |
| 55 19.15<br>161 24.00              | 35-36 B<br>47-48 G | 20-20 fms.<br>22 fms. <i>ditto</i>                                      |
| 55 18.35<br>161 21.40              | 60-61 B<br>62-63 E | 36-36 fms.<br>34-33 fms. <i>ditto</i>                                   |
| 55 18.40<br>161 22.70              | 59-60 B<br>50-51 G | 39-39 fms.<br>34-30 fms. <i>adjusted</i>                                |

Edgar E. Smith  
Assoc. Cartographic Engineer  
Seattle Processing Office

Approved and Forwarded:

*P. H. Hardy*  
P. H. Hardy  
Officer in Charge,  
Seattle Processing Office.

LIST OF SIGNALS

Triangulation:

Fgurth - 1913  
Gull - 1913  
Hill - 1913  
Jude - 1913  
Hol - 1941  
Rock off Cape Aliaksin - 1913  
Tolstoi - 1913  
Trap - 1913  
Ukolnoi Island Highest Peak - 1911  
Unga Spit Light - 1925  
West Head (Same as Win. - 1941)  
Wosnesenski - 1913

Hydrographic:

Chip (Vol. 1)  
Duns ( " 3)  
Fall ( " 1 & 3)  
Fan ( " 1 & 3)  
Hump ( " 1)  
Miss ( " 1)  
Nub ( " 1)  
Pen ( " 1)  
Pete ( " 1)  
Seal ( " 1)  
Shell ( " 1)  
Sl1 ( " 1)  
Sully ( " 1)  
Til (Seal Cape Lt.)  
Tip (Vol. 3)  
Water (Vol. 3)  
wet ( Vol. 3)



Surveys Section (Chart Division)

H6827

HYDROGRAPHIC SURVEY NO. ....

Records accompanying survey:

Boat sheets ..1.; sounding vols. .4...; wire drag vols. ....;
bomb vols. ....; graphic recorder rolls .2...;
special reports, etc. ....
.....

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

Number of positions on sheet .755.
Number of positions checked .59..
Number of positions revised .6...
Number of soundings recorded .7000 (Estimate)
Number of soundings revised (refers to depth only) .24..
Number of soundings erroneously spaced .20...
Number of signals erroneously plotted or transferred .....
Topographic details Time ...
Junctions Time ...
Verification of soundings from graphic record Time ..8..

Verification by A.R. STIRN... Total time .64.. Date Apr. 14, 1944

Review by R.H. Carstens... Time .17.. Date April 17, 1944

Remarks

Decisions

|    |                         |                   |
|----|-------------------------|-------------------|
| 1  |                         |                   |
| 2  |                         | U.S.G.B           |
| 3  |                         | 550 615<br>550605 |
| 4  |                         |                   |
| 5  |                         | 550605            |
| 6  |                         |                   |
| 7  |                         |                   |
| 8  |                         |                   |
| 9  |                         |                   |
| 10 | Location of tide staff. | 550605            |
| 11 |                         |                   |
| 12 |                         |                   |
| 13 |                         |                   |
| 14 |                         |                   |
| 15 |                         |                   |
| 16 |                         |                   |
| 17 |                         |                   |
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| 21 |                         |                   |
| 22 |                         |                   |
| 23 |                         |                   |
| 24 |                         |                   |
| 25 |                         |                   |
| 26 |                         |                   |
| 27 |                         |                   |

GEOGRAPHIC NAMES

Survey No. **H6927**

Name on Survey

|                          | A            | B                      | C                        | D                      | E             | F                  | G                  | H                | K  |
|--------------------------|--------------|------------------------|--------------------------|------------------------|---------------|--------------------|--------------------|------------------|----|
|                          | 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 |    |
| <u>Alaska</u>            |              |                        |                          |                        |               |                    |                    |                  | 1  |
| <u>Alaska Peninsula</u>  |              |                        |                          |                        |               |                    |                    |                  | 2  |
| <u>Cape Tolstoi</u>      |              |                        |                          |                        |               |                    |                    |                  | 3  |
| <u>Swedania Point</u>    |              |                        |                          |                        |               |                    |                    |                  | 4  |
| <u>Unga Strait</u>       |              |                        |                          |                        |               |                    |                    |                  | 5  |
|                          |              |                        |                          |                        |               |                    |                    |                  | 6  |
|                          |              |                        |                          |                        |               |                    |                    |                  | 7  |
|                          |              |                        |                          |                        |               |                    |                    |                  | 8  |
|                          |              |                        |                          |                        |               |                    |                    |                  | 9  |
| <u>Sand Pt., Peop I.</u> |              |                        |                          |                        |               |                    |                    |                  | 10 |
|                          |              |                        |                          |                        |               |                    |                    |                  | 11 |
|                          |              |                        |                          |                        |               |                    |                    |                  | 12 |
|                          |              |                        |                          |                        |               |                    |                    |                  | 13 |
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|                          |              |                        |                          |                        |               |                    |                    |                  | 20 |
|                          |              |                        |                          |                        |               |                    |                    |                  | 21 |
|                          |              |                        |                          |                        |               |                    |                    |                  | 22 |
|                          |              |                        |                          |                        |               |                    |                    |                  | 23 |
|                          |              |                        |                          |                        |               |                    |                    |                  | 24 |
|                          |              |                        |                          |                        |               |                    |                    |                  | 25 |
|                          |              |                        |                          |                        |               |                    |                    |                  | 26 |
|                          |              |                        |                          |                        |               |                    |                    |                  | 27 |

Names underlined in rsd approved  
by L. Heck on 4/20/44

# MEMORANDUM

## IMMEDIATE ATTENTION

SURVEY  
DESCRIPTIVE REPORT  
PHOTOSTAT OF

} No. H **H6927**  
No. T

{ received February 7, 1944  
registered February 12, 1944  
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                |
|-------|------|---------|------------------------------------|
| 20    |      |         |                                    |
| 22    |      |         |                                    |
| 24    |      |         |                                    |
| 25    |      |         |                                    |
| 26    |      |         |                                    |
| 30    |      |         |                                    |
| 40    |      |         |                                    |
| 62    |      |         |                                    |
| 63    |      |         |                                    |
| 82    |      |         |                                    |
| ✓ 83  | Pg 2 |         | Comdr Finnegan { Mr Richardson JFR |
| 88    |      |         |                                    |
| 90    |      |         |                                    |
|       |      |         |                                    |
|       |      |         |                                    |

**RETURN TO**

|    |                   |
|----|-------------------|
| 82 | Comdr. R. W. Knox |
|----|-------------------|

LAC  
HRE

TIDE NOTE FOR HYDROGRAPHIC SHEET

February 24, 1944.

~~Division of Hydrography and Topography:~~

✓ Division of Charts: Attention: H. R. EDMONSTON

Plane of reference approved in  
4 volumes of sounding records for

HYDROGRAPHIC SHEET 6927

Locality Cape Tolstoi to Swedania Point, Alaska Peninsula

Chief of Party: L. C. Wilder in 1943  
Plane of reference is mean lower low water reading  
3.7 ft. on tide staff at Sand Point, Popof Island  
3.4 ft. below B. M. 3

Height of mean high water above plane of reference is 10.3 feet.

Condition of records satisfactory except as noted below:

*C. K. Green*

Chief, Division of Tides and Currents.

DIVISION OF CHARTS

REVIEW SECTION - SURVEYS BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. 6927

Field No. 4143

Alaska, South of Alaska Peninsula,  
Cape Tolstoi to Swedania Point  
Surveyed September - October 1943; Scale 1:40,000  
Oral Instructions of August 16, 1943

Soundings:

808 Fathometer  
Dorsey Fathometer III

Control:

Three-point fix on shore signals

Chief of Party - L. C. Wilder  
Surveyed by - L. S. Hubbard; W. F. Malnate; H. S. Cole  
Protracted by - W. M. Martin  
Soundings plotted by - W. M. Martin  
Verified and inked by - A. R. Stirni  
Reviewed by - R. H. Carstens  
Inspected by - H. R. Edmonston, April 17, 1943

1. Shoreline and Signals

No shoreline was transferred to this offshore survey. Signals originate with triangulation of 1911-41 and with sextant fixes recorded in the sounding records.

2. Sounding Line Crossings

Satisfactory.

3. Submarine Relief

Because of the widely spaced sounding lines in certain sections of the survey, some of the depth curves could only be generalized. The bottom is very irregular and additional development is needed before the curves can be drawn with confidence.

Two shoals of 15 fathoms and 20 fathoms were developed in the vicinity of Lat.  $55^{\circ}20'$ , Long.  $161^{\circ}24'$ . In Lat.  $55^{\circ}22.5'$ , Long.  $160^{\circ}54.0'$  a 29-fm. pinnacle rises from depths of about 42 fathoms and in Lat.  $55^{\circ}25'$ , Long.  $160^{\circ}45'$  the bottom rises sharply from below 20 fathoms to a depth of 5 fathoms.

4. Junctions with Contemporary Surveys

There are no contemporary surveys adjoining this area. Prior sounding machine, pressure tube and hand lead surveys date from 1913 to 1924.

5. Comparison with Prior Surveys

|                  |           |
|------------------|-----------|
| H-3574 (1913)    | 1: 20,000 |
| H-3654 (1913-14) | 1:100,000 |
| H-3722 (1914)    | 1:100,000 |
| H-4380 (1924)    | 1: 40,000 |
| H-4494 (1925)    | 1: 20,000 |

H-4494 and H-3574 overlapping small sections on the east and H-4380 overlapping a small area on the west are in good agreement with the present survey. H-3654 and H-3722 are small scale reconnaissance surveys which in a few places contain differences of as much as 6 fathoms with depths of the present survey. As the present survey is not considered sufficiently well developed to supersede shoaler soundings on the prior surveys, it should be used to supplement them within the common area.

6. Comparison with Chart 8704 (latest print date 12-17-43)  
Chart 8700 (latest print date 10-30-43)a. Hydrography

The hydrography charted within the limits of the present survey originates with the previously discussed surveys which need no further consideration and with track line soundings of the U. S. Navy found in various chart letters. The 10-fm. sounding charted in Lat. 55°21.6', Long. 161°01.7' from this latter source is considered erroneous and should be disregarded. Other soundings should be retained pending a more complete development of the area.

b. Aids to Navigation

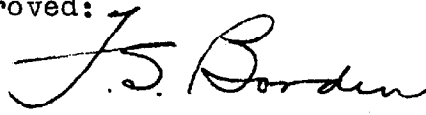
The survey positions of the charted aids to navigation are in satisfactory agreement with the charted positions and adequately mark the features intended.

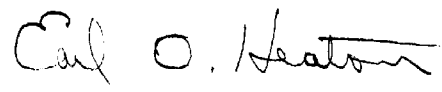
The peak charted as the highest point on Ukolnoi Island from H-3654 (1913-14) was probably plotted in error on the original survey. Cuts from that survey as well as the present survey check the 1911 triangulation location.


7. Condition of Survey  
Satisfactory.
8. Compliance with Instructions for the Project  
Verbal instructions were issued for this survey.
9. Additional Field Work Recommended  
Shoal development and numerous split lines are needed if it should be desired that this serve as a basic survey of the area covered.
10. Superseded Surveys  
None.

Examined and approved:

  
Chief, Surveys Branch

  
Chief, Division of Charts

  
Chief, Section of Hydrography

  
Chief, Division of  
Coastal Surveys



|                  |      |                |        |
|------------------|------|----------------|--------|
| Applied to chart | 8704 | July 28, 1944. | F.A.M. |
| " " "            | 8700 | Aug. 5, 1944   | L.O.M. |
| " " "            | 8859 | Aug. 12, "     | S.P.   |
| " " "            | 8703 | Sept. 1, "     | S.P.   |