

4933



4933



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

DESCRIPTIVE REPORT

Topographic | Sheet No. U - A - 35
~~Hydrographic~~

State Alaska

LOCALITY

~~Parts of Unalaska and Unalga~~

~~Islands., Aleutian Is., Alaska.~~

Kalekta Bay & Baby Pass

193 5

CHIEF OF PARTY

A. M. SOBIERALSKI, H. & G. E.

U. S. COAST & GEODETIC SURVEY
LIBRARY AND ARCHIVES

APR 21 1936

Acc. No. _____

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Applied to compilation of Chart # 9007. S.B.M. July 1936

" to drawing dated May 5, 1936 of chart No 9008, before review. S.B.M. April 1936

Applied to drawing of Chart No. 8860 S.B. Maize June 1937

Applied to drawing of Chart No. 8802 S.B. Maize June 1937

(extended)
Applied to new compilation of Chart No 9007, S.P. Aug 1938

Applied to compilation of chart 8720 Mar. 13, 1913 J.H.S.

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. U-A-35 4933

REGISTER NO.

State Alaska

General locality ~~Aleutian Islands~~

Locality ~~Parts of~~ Unalaska and Unalga Islands Kalekta Bay + Baby Pass

Scale 1:20,000 Date of survey June & September, 1935

Vessel U. S. C. & G. S. S. SURVEYOR

Chief of Party A. M. Sobieralski

Surveyed by John C. Ellerbe - E. H. Sheridan

Inked by John C. Ellerbe - E. H. Sheridan

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

Contour, Approximate contour, Form line interval 100 feet

Instructions dated April 13, 1934

Remarks:

DESCRIPTIVE REPORT
to accompany
TOPOGRAPHIC SHEET U-A-35
PROJECT HT-176

A. M. Sobieralski, Commanding -o- U. S. C. & G. S. S. SURVEYOR

Authority: Director's instructions dated April 13, 1934.

Control: Triangulation executed by parties of A. M.
Sobieralski and H. B. Campbell in 1934 and 1935.

Extent: This sheet covers parts of Unalga and Unalaska Ids, Aleutian Ids., Alaska, joining work done in the same vicinity during season 1934. On Unalga Island, the survey covers the shoreline from the east side of Malga Bay to the most easterly point of the island, and includes the Baby Islands. On Unalaska Island the survey covers Kalekta Bay and vicinity. Form lines were completed on the north side of Unalga Island and the Baby Islands, and extended from 1 to $1\frac{1}{2}$ miles inshore in the vicinity of Kalekta Bay.

General Description: The north coast of Unalga Island is mainly characterized by precipitous bluffs rising from 100 to 200 feet high, blending abruptly at the top into rolling, slightly rising, tundra covered table land. There is generally no beach, though a flat rock shelf from ten to thirty feet wide extending outward from the cliff at the water's edge. In places, a few scattered boulders may be found on this shelf.

The Baby Islands are a group of fairly low islands about one mile northeast of Unalga Island. They are all tundra covered. The four southerly islands of the group are over 100 feet high, while the two northerly ones are low and flat. On the most westerly island of this group is a large rookery, and the ground is very pitted over almost the entire top. Between the islands are narrow channels, comparatively shoal, through which the tidal currents flow very rapidly. Small boats may proceed with caution through these channels. Baby Pass, between Unalga Island and the Baby Group is navigable, though very strong tidal currents are encountered, sometimes becoming rips.

Kalekta Bay is a broad open bay in the north end of Unalaska Island just east of Unalaska Bay. On the west side of the bay 3 miles in from Cape Kalekta, a gap cuts through to Constantine Bay in a west-southwesterly direction. This gap is filled by a lagoon not connected with either bay. A reef extends 400 yards offshore just south of this gap. The coastline around Kalekta is generally steep rocky bluffs ranging from less than 100 feet to as high as 1200 and 1300 feet. At the head of

General Description - continued:

the bay there is a wide flat marshy area that contains one large lake and a number of smaller ones. A narrow meandering stream connects the larger lake with the head of Kalekta Bay. There is a small bight $1\frac{1}{2}$ mile in diameter on the east side of the bay 1 mile in from Erskine Point.

Prominent Features: From the northwest and southeast, the Baby Islands are fairly prominent, though they tend to blend together in such a manner that they appear as one island rather than a group. From all other directions they blend into Unalga Island so as to be indistinguishable.

On the west side of Kalekta Bay $1\frac{1}{2}$ miles in from Cape Kalekta is a narrow pinnacle rock 45 feet high, 100 meters off shore.

At the southwestern entrance to the small bight on the east side of Kalekta Bay there are three pinnacle rocks 100 to 150 meters off shore. They are 64, 69 and 102 feet high respectively.

Character of Control: On Unalga Island, the control found was not sufficient for an accurate survey. Δ "Back" could not be seen, and Δ "Close" would not see the shoreline to the southeastward. Δ "Bridge" could seldom be used, as it was cut out by the two islands to the southward. Therefore, additional control was established by plane table triangulation. Signals were erected at North, South, El and Left. The plane table was set up at Bridge and oriented on Unalga and Triplet. Cuts were then drawn to South and North. The planetable was moved to South, set up, and oriented back on Bridge. Resection lines were then drawn from Unalga, Triplet and Back. These intersected in a point on the orientation line from Bridge. Cuts were drawn to North, El and Left. The planetable was moved to North, set up, and oriented back on Bridge. Resection lines were drawn from Unalga, Triplet and Close. These lines intersected at a point on the orientation line from Bridge, thus giving the location of North. Resection on South checked the position of that station. Cuts were then drawn to El and Left, giving their positions by intersection with the cuts from South. A third cut to El and Left from a checked set-up on 3' rock 500 meters southsoutheast of Gul checked the positions of these two stations. None of the auxilliary stations were permanently marked.

In Kalekta Bay a supplementary triangulation station "Clam" was established on the west side near the head of the bay. With the aid of this station all the fixed work in this vicinity was completed by graphic triangulation. All topographic stations were located by at least three good intersecting cuts. All cuts taken on this portion of the sheet checked unusually well and it was not necessary to run any traverses.

Closing errors of traverses run:

On Unalga Island, began traverse at Close, running northwestward, and closed on Malga; no error in distance, 3 meters in azimuth.

Began second traverse at Close, running south-eastward, and closed on Left, rechecking the position of this signal by resection cuts on South, North and E1 - flat closure.

All possible cuts to signals along the courses of these two traverses had been drawn while executing the auxilliary control referred to above. While running these traverses, all possible cuts were drawn to signals on the Baby Islands.

A third traverse was begun on the flat island near End, locating planetable by 3 point fix, and run around north side of Baby Island group, closing on Bridge - no error in Azimuth, 3 meters in distance.

Set up table on rock at Mid, and located by 3 point fix. Rodded in all possible shoreline and signals from this set-up.

Shoreline on south sides of three southeasterly islands of the group was sketched in from launch between signals and rocks previously located by cuts.

All necessary adjustments of traverses were made.

Anchorage: On Unalga Island no anchorages for large vessels were found in the area surveyed. Small boats may get fair protection from S'ly or W'ly weather in the small, shallow bight south of Gul. Shelter inside the Baby Islands is not recommended.

Anchorage may be found in Kalekta Bay in the south end of the bay 1/2 mile from shore in 12 to 20 fathoms, sandy bottom. Small craft may find anchorage in the center of the small bight on the east side of the bay, 1 mile in from Erskine Point, in 5 fathoms, rocky bottom.

Comparison with previous surveys:

During season 1934, the shoreline from Left to Close and signals from Left to Malga on Unalga Island were located, but due

Comparison with previous surveys - continued:

to inadequate control, the work was not satisfactory. The 1934 locations of signals in this area were never used. This sheet covers part of the area covered by Sheet T-2544. Sheet T-2544 was done on a scale of 1-40,000 and a cursory comparison of the shoreline was made with no appreciable discrepancies noted. Sheet U-A-35 was done on a scale of 1-20,000 - it should be accepted in compiling a new chart.

Junctions with other surveys:

The work on Unalga Island makes satisfactory junctions, at both ends, with sheet field number U-E-34, season 1934, SURVEYOR.

The work on this sheet in the vicinity of Kalekta Bay joins sheet U-E-34 on the east and sheet G-35 of the U. S. C. & G. S. S. DISCOVERER on the west satisfactorily.

New Geographic Names: No new geographic names were assigned to this sheet. All names used were taken from Chart No. 8860.

Datum: The datum used on this survey is 1901 Unalaska.

Unalga Island Statistics:

Statute miles of shoreline... 15.7
Area in square statute miles... 4.3
Number of elevations obtained... 31

Kalekta Bay Statistics:

Statute miles of shoreline... 11.5
Area in square statute miles... 12.0

Respectfully submitted,

John C. Ellerbe
John C. Ellerbe, Jr. H. & G. E.
E. H. Sheridan
E. H. Sheridan, Aid.

Approved & forwarded:

A. M. Sobieralski
A. M. Sobieralski, H. & G. E.
Commanding, Str. SURVEYOR

Remarks

Decisions

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2	Rand McNally has 'Kalekta'; obviously a misprint.	<u>Kalekta</u>
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GEOGRAPHIC NAMES
Survey No. **T4933**

GEOGRAPHIC NAMES		On Chart No. 8860		On previous survey No. 72544		On U.S. Quadrangle Maps 8802		From local information		On local Maps		P. O. Guide or Map		Rand McNally Atlas		U.S. Geog. Dict. of Alaska	
Survey No. T4933																	
Name on Survey		A	B	C	D	E	F	G	H								
Bering Sea		*		✓				✓	✓	✓							1
Kalekta Bay		*		✓					✓	✓							2
Unalaska Island		*		✓					✓	✓							3
Erskine Pt.		*								✓							4
Unalga Pass		*	✓	✓					✓	✓							5
Unalga Island		*	✓	✓					✓	✓							6
Baby Pass		*	✓						✓								7
Baby Islands		*	✓	✓					✓								8
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Names underlined in red approved

on 6/11/36

M 234

Names underlined in red approved
on 6/11/36
[Signature]

REVIEW OF TOPOGRAPHIC SURVEY No. 4933

Title (Par. 56) *Kalekta Bay and Baby Pass, S.W. Alaska*

Chief of Party *A.M. Sobieralski* Surveyed by *J.C. Ellerbe* Inked by *J.C. Ellerbe*
E.H. Sheridan

Ship *Surveyor* Instructions dated *April 13, 1934* Surveyed in *June & Sept. 1935*

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.
Not sufficient recoverable stations for resurvey
3. The control and closures of traverses were adequate. (Par. 12, 29.) ✓
4. The amount of vertical control that the Manual specifies for ~~contour~~-~~form~~lines- was accomplished. (Par. 18, 19, 20, 21, 22, 23.)
Not sufficient number of elevations taken
5. The delineation of ~~contour~~-~~form~~lines- is satisfactory. (Par. 49, 50.)
Formlines are not accentuated properly, nor do they properly join adjacent sheets
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.) *None submitted*
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.) *Legends and symbols very poorly shown*
9. Rocks and other important details shown on previous surveys and on the chart were verified. (Par. 25, 26, 27.)
See reverse side
10. ~~The span, draw and clearance of bridges are shown. (Par. 16c.)~~
11. Locations and elevations of summits are given. (Par. 19, 51.)
Elevations of summits incomplete
12. The tree line was shown on mountains. (Par. 16g.)
No trees - grass line not shown

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.

T2544 (1901)

Several rocks on T2544 on Analga Island on the South side of Baby Pass do not agree in detail as they are shown on the present survey. There is no doubt that these rocks are shown more accurately and more in detail on the present survey and are to be accepted.

That portion of the present survey around Kalekta Bay, in general, agrees with T2544 but there is much more detail as to shore line, rocks and islets on T4933 than on T2544. T4933 supersedes T2544 in part.

Chart 8860

The present survey has not been applied to the chart. Hence differences in detail are as indicated under T2544 above.

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.)
No points shown for distortion
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.) *8 Cards Submitted*
16. A list of landmarks for charts was furnished on Form 567 and plotting checked. (Par. 16d, e, 60.) *None submitted*
17. The magnetic meridian was shown and declination was checked. (Par. 17, 52.) *Declination about 4° East of that shown on chart 8860*
No note of having checked declinoire
18. The geographic datum of the sheet is *Unalaska (Unadjusted)* and the reference station is correctly noted. (Par. 34.) ✓
19. Junctions with contemporary surveys are adequate.
Joins T 4920 (1934) on the East (500 Reverse side) and on the North
Joins T 6429 (1935) on the N.W.
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 ^{Poor} ~~good~~. (Par. 31, 32, 33, 35, 36, 37, 38, 39, 40, 41, 42, 45, 46, 47, 48, 49, 50.) *Lettering is fair - Legend not properly made - Rock symbols too small - Form lines poorly drawn (in part)*
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 *Chas. R. Bush* June 5, 1936

Examined and approved:

E. T. Green
Chief, Section of Field Records

Fred. L. Peacock
Chief, Section of Field Work

L. O. Dolbert
Chief, Division of Charts

Glude
Chief, Division of Hyd. and Top.

Paragraph 19

The last paragraph on Page 3 of the Descriptive Report (T4933) is considered as sufficient authority for accepting this survey in place of T4920 for that portion of the overlapping topography on the two surveys.

MEMORANDUM

IMMEDIATE ATTENTION

SURVEY
DESCRIPTIVE REPORT
~~PHOTOSTAT OF~~

~~No. H~~

No. T 4933

received APR 21 1936
registered MAY 20 1936
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

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C. K. Green

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