

6420

Form 504
Ed. June, 1928

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

R. S. Patton, Director

U. S. COAST & GEODETIC SURVEY
LIBRARY AND ARCHIVES

APR 8 1936

State: Alaska

Acc. No.

DESCRIPTIVE REPORT

Topographic
~~Hydrographic~~

Sheet No. G 2429

LOCALITY

Aleutian Islands

Unalaska Island

Unalaska Bay - East Shore

1935

CHIEF OF PARTY

H. B. Campbell

U. S. GOVERNMENT PRINTING OFFICE: 1930

6800

Applied to drawing dated May 5, 1936 of chart #9008

S.B. Mearns May '36

" " New compilation

#9007

S.B. Mearns May '36 Dec. 36

Applied to drawing of chart No 8860

S.B. Mearns Dec 1936

Applied to drawing of chart No 8802

S.B. Mearns June 1937

Applied to new compilation of chart No. 9007, (extended)

S.B. Mearns Aug. 1938

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. G

REGISTER NO. **T6429**

State Alaska

General locality Unalaska Island

Locality Unalaska Bay--East Shore²³

Scale 1:20,000 Date of survey July, 1935

Vessel U.S.S. DISCOVERER

Chief of party H. B. Campbell

Surveyed by H. J. Seaborg

Inked by H. J. Seaborg

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

~~Contours. Approximate contours.~~ Form line interval 100 feet

Instructions dated Project HT-177. April 13, 1934

Remarks: _____

DESCRIPTIVE REPORT

to accompany

Topographic Sheet No. G

Pinnacle Rock to Cape Kalekta

Unalaska Island, Alaska

July 1935.

Scale - 1:20,000

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

H. B. Campbell, Commanding.

INSTRUCTIONS

The topography was executed in accordance with the Director's instructions, Project HT-177, dated April 13, 1934.

LIMITS

This sheet is a resurvey of the east shore of Unalaska Bay, extending from Pinnacle Rock north and east to Cape Kalekta.

JUNCTIONS

This sheet joins sheet A of the work done in 1934 at the south and makes a junction at the north with the work done by the U.S.S. SURVEYOR in 1935. Station DELTA, marked and described, is the common point on the two sheets. Satisfactory connection was made with form lines and elevations of last year's work which has been shown in pencil.

CONTROL

This sheet was adequately controlled with 18 triangulation stations and one topographic station of Sheet A-1934 (Ulakta Head Light).

METHODS

Ordinary plane table methods were used in making this survey.

Successive traverses were run between control points. Also dead end traverses were run for the delineation of the lakes appearing on the sheet. All traverses were adjusted in the usual manner.

TRAVERSES

From	To	Length Statute Miles	Closure Meters	Closure per mile
Abel 1934	Pinnacle Rock 1934	1.8	11	6.1
Abel 1934	Ken 1934	1.5	4	2.7
Ken 1934	Max 1934	1.4	5	3.6
Max 1934	Princess Head #3 1934	4.0	10	2.5
Princess Head No. 3 1934	Priest Rock 1934	2.3	17	7.4
Priest Rock 1934	Delta (Topo)	0.6		Dead end
Ker (topo)	Through lake east of Constantine Bay	1.2		" "
Far (topo)	Through lake south of Constantine Bay	0.1		" "
Key (topo)	Through lake south of Summer Bay	0.7		" "

CHARACTER OF SHORELINE

Cape Kalekta on the north and west sides presents cliffs, very rugged and precipitous which rise up practically from the high water line. The cape can be distinctly identified from and east or west direction by the rounded rocky knob which is the highest portion of the cape, being 904 feet in height. (See picture A on page 8 of this report). The area about the north end of the cape is very foul with rocks and kelp. A rock awash (Station EST) 600 meters from shore was located, it being the outermost rock visible to the topographic party. If there are any rocks further out they were not apparent. Just off the mainland to the northwest are a group of high water rocks the most prominent being Priest Rock, 204 feet high. (See picture A on page 8 of this report). This rock has an unwatched flashing white light on its northern side and is also marked by

a large whitewashed square at its base. The position of the light is indicated by a black dot properly labeled in lieu of the customary symbol so as not to obliterate necessary detail.

The shoreline from Cape Kalekta to the head of Constantine Bay is very rocky and strewn with boulders. There are a number of places impassable on foot, due to the precipitous cliffs which front this shore. Princess Head, a square shaped vertical sliver of rock over 200 feet high projects from the general shoreline about 2 miles south of the Cape. (See picture B on page 8 of this report). This head is distinctive and an important landmark. Between the Cape and Princess Head the shoreline makes out to a grassy point which rises abruptly to 150 feet and then slopes gently back and up to a number of jagged peaks of no particular distinction. To the south of Princess Head a peak rises to over 1700 feet and then falls gradually to the lake which lies east of Constantine Bay. (See picture C on page 8 of this report).

The shoreline at the head of Constantine Bay is sandy and the area inland presents grassy slopes rising on three sides from the lake at the head of the bay. The area about the rounded point west of Constantine Bay is foul with rock and kelp. The shoreline continues rocky and the area outside of the high water line foul down to Pinnacle Rock. However, Morris Cove, Humpback Cove, and the south end of Summer Bay have short stretches of sandy beach. The bluffs along the shore between stations MAX and KEN is very rugged composed of gray rocky knobs having deep vertical scars giving the appearance of vertical stratification. Split Top Mountain marks the south end of this formation. (See picture D on page 8 of this report). In general, shoreline exposed to the north and west are rocky bluffs which upon going over the sharp ridges fall away to the south and east in long grassy slopes. (See picture D).

HIGH WATER LINE

The high water line is defined by the outside edge of the heavy black line. In a few instances the line has not been inked in as heavy in order to preserve the delineation of other features. The outline of lakes is the center of the inked line.

FOUL AREAS, ROCKS, REEFS

A short black dash line has been used to represent the outside limit of the foul area obtainable by the topographic party. The area between the foul area line and the high water line is rock infested including rocks awash and sunken. Rod shots and cuts were taken to the outermost line of rocks and the line showing foul area includes all rocks closely grouped which extend from the high water line. In addition, individual sunken and rocks awash, which because of their outer position could not be rightfully included within the foul area line, have been shown by the customary symbol and note. Rocks above high water have been shown by the customary symbol.

A location different from that of sheet A-1934 was obtained for the two rocks awash north of Pinnacle Rock. A full discussion is made on this change in the hydrographic report of this area.

ELEVATIONS AND FORM LINES

All elevations above M.H.W. are shown with figures in red. This applies to high water rocks as well as ground elevations. The position of all land points has been indicated by a red dot and the height figures placed over or to one side of the dot. The form line interval is 100 feet. With the exception of a very few sextant cuts all elevations were obtained by plane table and the form lines drawn in while set up in the field. All field data was recorded in sketch books. In addition sketches were made

of the ridge line of peaks at different positions to facilitate the form line work. ~~This data is contained in Volumes 3 and 4 of three volumes of sheets 6 and 7.~~ All form lines were verified by offshore observations.

VERIFICATION AND CHANGES TO TOPOGRAPHY

This survey was compared to the current issue of Chart 9007. The shoreline agrees very closely between Pinnacle Rock and Station MAX. But from MAX to Cape Kalekta the shoreline is considerably in error. Stations PRINCESS HEAD, KIT, and KALEKTA plot reasonably in place. Constantine Bay is much larger than shown, actually being almost a mile wide at the entrance. This cuts the lake east of the bay in half. A lake south of the bay was rodded in. This lake does not appear on the chart. Split Top Mountain was located about 450 meters west of the chart position with an elevation of 1851 feet instead of 2100. The beacon on Priest Rock is 60 meters too far north. The chart shows a high water rock offshore 260 meters. This rock does not exist. (S end of Summer Bay).

LANDMARKS

Priest Rock, 204 feet high, is one of the most important landmarks upon entering Unalaska Bay. It is marked with a flashing white light on its northern side and a large whitewashed square at its base. From an east or west direction Cape Kalekta can be easily recognized by its rounded, rocky knob, 904 feet high. The general height of the Cape is between 700 and 800 feet. Princess Head is an important and distinctive landmark especially when in close to the east shore or when fog closes out the peaks. When approaching from the northwest the peak above and back of the head will serve to identify it. Split Top Mountain can be seen as the highest part of the rocky head of land along the west shore of Constantine Bay. Pinnacle Rock was recommended as a landmark in the

survey of sheet A-1934. Since the survey work of 1934 about Amaknak Island, a yellow cross has been painted on the east side of the bluff about 325 feet above high water. This should be charted as a landmark of importance when entering Iliuliuk Bay in thick weather. The cross was located in this survey. *Priest Rk. light approximately 30' above M.H.W. is visible to the east, north and west*

GEOGRAPHIC NAMES

While working in this area, frequent contact was made with fishermen, prospectors and the like in regard to the names in local use. There seems to be no reason to change the following names as they are well established:

Priest Rock

Summer Bay

Cape Kalekta

Pinnacle Rock *

Princess Head

Split Top Mountain

Constantine Bay

Morris Cove and Humpback Cove are names in local use recommended for the small coves within Summer Bay. *Humpback Cove* is especially appropriate as great quantities of humpback salmon spawn up the creek which empties into this cove. *up every creek*

Two old shacks is all that remains of the Indian village Imagnee. Signal RAN marks the location of the largest of these shacks. It is recommended that this name be taken off the chart.

NOTE: Names were inked in prior to knowledge of change of practice.

COAST PILOT

Cape Kalekta is about 700 instead of 500 feet.

Priest Rock is 204 instead of 175 feet. ✓

Second Priest is now known as Pinnacle Rock. *

* See Letter 364 (1934) Chart File regarding changing Pinnacle Rock to Second Priest Rock R

STATISTICS

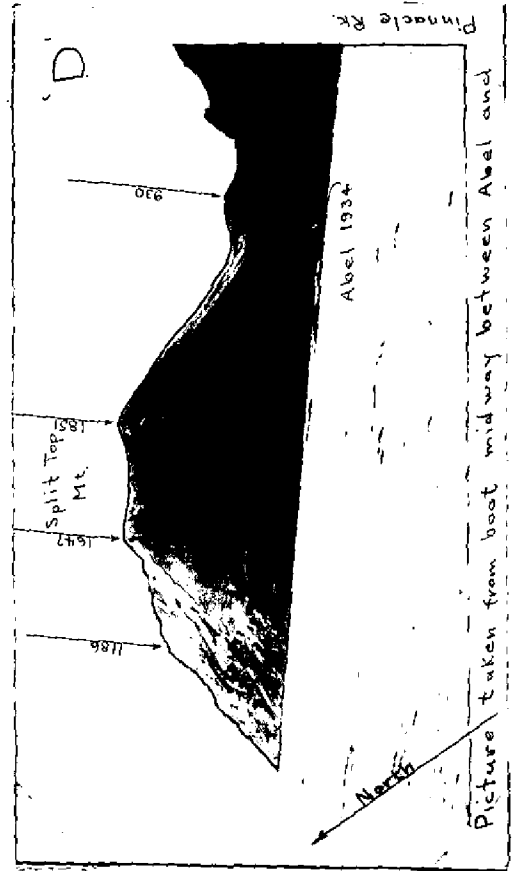
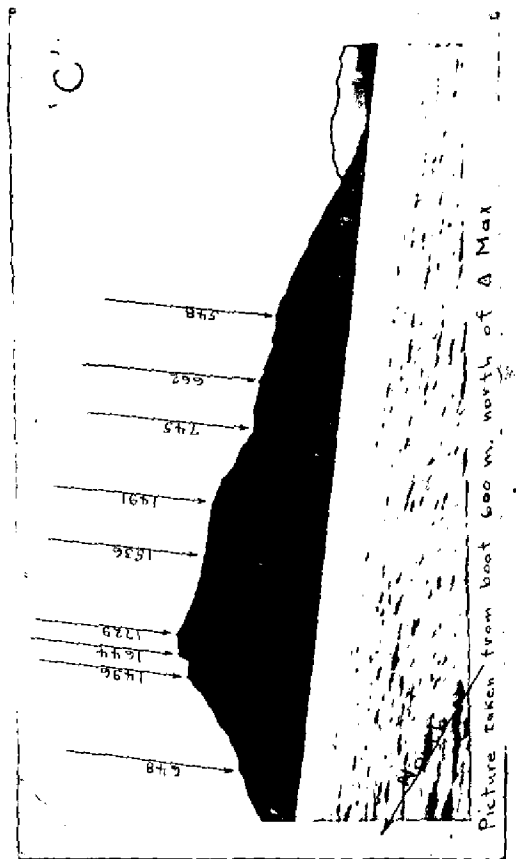
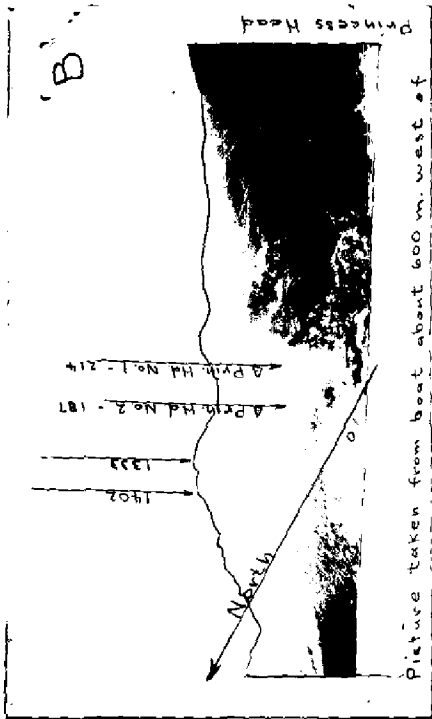
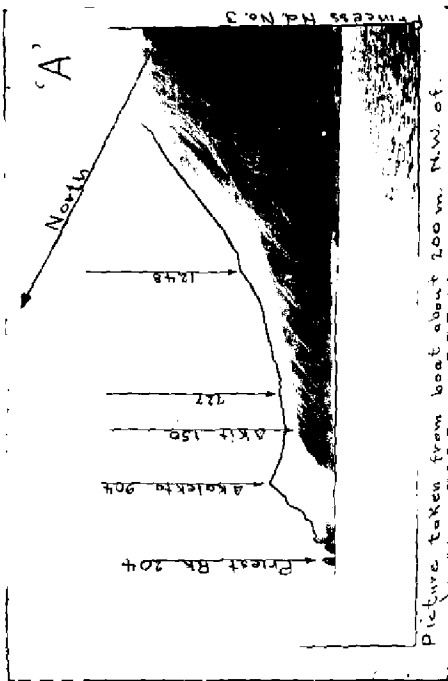
Statute miles of shoreline, high water. 15.0
Statute miles of shoreline (marsh, creeks, rivers, lakes) 10.9
Statute miles of shoreline, low water 14.5
Number of offshore rocks. 25
Number of elevations determined 82
Area, square statute miles. 14.1
Number of recoverable positions:
 Triangulation. 18
 Plane table. 4

Respectfully submitted,

H. J. Seaborg
H. J. Seaborg, Aid,
Coast and Geodetic Survey.

Approved and forwarded:

H. B. Campbell
H. B. Campbell, H.&G.E.,
Chief of Party, C. & G. S.



LIST OF RECOVERABLE STATIONS

Name	Latitude	D.M.	Longitude	D.P.	Height	Description
Delta	54 00 ✓	679 ✓	166 21 ✓	1051 ✓	8 ✓	Stamped disc along shore ✓
Rock	53 58 ✓	463 ✓	166 24 ✓	965 ✓	12 ✓	Largest and highest of two offshore rocks. ✓
Deb	53 56 ✓	1819 ✓	166 25 ✓	532 ✓	1 ✓	Innermost of two offshore rocks.

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

LANDMARKS FOR CHARTS

Unalaska Bay

January, 19 36

SUPERINTENDENT, U. S. COAST AND GEODETIC SURVEY:

The following determined objects are prominent, can be readily distinguished from seaward from the description given below, and should be charted:

H. B. Campbell

Chief of Party.

[illegible]

A list of objects which are of sufficient prominence for use on the charts, together with a description of the same, must be furnished in a special report on this form, and a copy of such report must be attached by the Chief of Party to his descriptive report. The selection, determination, and description of these points are of primary importance.

The description of each object should be short, but such as will identify it; for example, standpipe, water tower, church spire, tank, tall stack, red chimney, radio mast, etc. Generally, flagstaves and like objects are not sufficiently permanent to chart.

Remarks

Decisions


1		
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6	chart 8866 has "Split Top." Recommend change	Split Top Mt.
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9	SCANT reason for giving this small in- dentation & SPECIA/NAME.	
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GEOGRAPHIC NAMES

Survey No. 6429

GEOGRAPHIC NAMES		Survey No. 6429									
Name on Survey	<div>On Chart No. 9007</div> <div>On previous survey No.</div> <div>On U. S. charts 8860</div> <div>From local information 76429</div> <div>P. O. Guide or Map</div> <div>Rand McNally Atlas</div> <div>U. S. Light List</div>										
	A	B	C	D	E	F	G	H	K		
<u>Unalaska Bay</u> ✓	*		✓				✓		✓	1	
<u>Unalaska Island</u> ✓	*		✓						✓	2	
<u>Cape Kalekta</u> ✓	*		✓						✓	3	
<u>Princess Head</u> ✓	*		✓							4	
<u>Constantine Bay</u> ✓	*		✓							5	
<u>Split Top Mt.</u> ✓	*		✓							6	
<u>Summer Bay</u> ✓	*									7	
<u>Morris Cove</u>				✓	*					8	
Humpback Cove							•			9	
<u>Priest Rk.</u> ✓	*		✓					✓		10	
										11	
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Names underlined in red approved

by 

on 4/28/36

M 234

Names underlined in red approved
by *[Signature]* on 4/28/36

MEMORANDUM

IMMEDIATE ATTENTION

SURVEY
 DESCRIPTIVE REPORT } No. H
 PHOTOSTAT OF } No. T 6429

{ received April 9, 1936
 { registered April 14, 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
20			
22			
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26			
30			
40			
62			
63			
82			
83			
88			
90			

RETURN TO

82	
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C. K. Green April 18- '36

REVIEW OF TOPOGRAPHIC SURVEY No. 6429

Title (Par. 56) *East Shore of Unalakleet Bay, S.W. Alaska*Chief of Party *H.B. Campbell* Surveyed by *H.J. Seaborg* Inked by *H. J. Seaborg*Ship *Discoverer* Instructions dated *April 13, 1934* Surveyed in *July, 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. ✓
Except that only one magnetic observation was shown
3. The control and closures of traverses were adequate. (Par. 12, 29.)
Traverses adjusted according to the Topographic Manual
4. The amount of vertical control that the Manual specifies for ~~con-~~
~~tours-formlines-~~ was accomplished. (Par. 18, 19, 20, 21, 22, 23.)
Frequent Elevations taken
5. The delineation of ~~contours-formlines-~~ is satisfactory. (Par. 49, 50.) ✓
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.) *No maps submitted - Very good pictures 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.) ✓
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.) ✓
12. The ^{grass} ~~tree~~ line was shown on mountains. (Par. 16g.)
No trees in this area - 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.

T1950 (1867)

The present survey only covered a very small portion of survey T1950 around pinnacle rock. No later surveys show the sunken rocks nor are they shown on the chart.

T2135-a (1871-2)

The surveys T2135 and T2135-a were more or less reconnaissance surveys. In general they are in good agreement with the present survey except for detail. A foul area line is drawn ~~outside~~ outside the H.W. line with no individual rocks shown inside the line. Rocks outside this foul area line are rodded in.

The present survey supersedes T1950 and T2135-a in part.

Chart 9007

Comparison of the present survey with Chart 9007 bears out the topographers discussion on page 5 of the Descriptive Report. The area around Constantine Bay on the chart is not dependable. Neither the present topographic survey or contemporary hydrographic survey (H5978) show these sunken rocks. Details on the new edition of ^{Chart} 9007 on which the present survey has been applied will agree with T6429.

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.) ✓
14. ~~The descriptive report also contains additional information required in aere-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.) *1 Card Submitted*
16. A list of landmarks for charts was furnished on Form 567 and plotting checked. (Par. 16d, e, 60.) ✓
17. The magnetic meridian was shown ✓ and declination was checked. (Par. 17, 52.) *Only one observation shown*
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. *(see over)*
Joins T 4933 on the North
Joins T 4888 (1934) on the South (see reverse side)
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 good. (Par. 31, 32, 33, 35, 36, 37, 38, 39, 40, 41, 42, 45, 46, 47, 48, 49, 50.) *Freehand lettering on the survey sheet is not very good.*
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. Bishop* June 8, 1936.

Examined and approved:

E. K. Green
Chief, Section of Field Records

R. A. Polhart
Chief, Division of Charts

Fred. R. Peacock
Chief, Section of Field Work

G. H. de
Chief, Division of Hyd. and Top.

Paragraph 19

The junction with T4888 (1934) is in fair agreement except for detail. The two rocks North of the pinnacle rock are not in the same position as on T4888. Even though T4888 is on a scale of 1:5,000 and the present survey is 1:20,000 the rocks were rodded in on the present survey and should be accepted for this detail. The contemporary hydrographic survey H5978 shows the rocks as on the present topographic survey (See Descriptive Report H5978).

* The two rocks above referred to, have been deleted from T4888, see note, bottom of page 4 of D.R. for H-5978 (1935)

J.C.L.
July 25, 1936