

APR 18 1940

Ass. No.

6721

~~CONFIDENTIAL~~

6721

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Form 504 Ed. June, 1928	
DEPARTMENT OF COMMERCE U. S. COAST AND GEODETIC SURVEY L.O. Colbert, Director	
State: <u>Alaska</u>	
DESCRIPTIVE REPORT	
Topographic } Hydrographic }	Sheet No. Field D-39 . Reg. No.- T- 6721
LOCALITY	
<u>Alaska</u> Alutian Islands	
<u>South Coast</u> Unalaska Island	
and Staraya Bays.	
Protection Eight eastward	
193 9	
CHIEF OF PARTY R L Schoppe	

U. S. GOVERNMENT PRINTING OFFICE: 1925

DECLASSIFICATION BY NOAA
PURSUANT TO DOC SYSTEMATIC REVIEW
GUIDELINES AS DESCRIBED IN SECTION
3.3 (a), EXECUTIVE ORDER 12356

Applied to Chart comp. 9019. L.A.M. June 4, 1940.

Applied to Chart Comp. 9018 H.M. June, 1940.

" " " 8860. July 1940 D.S.B.

" " " 8802 Nov. " J.M.A.

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. D-39

T6721

REGISTER NO. T-6721

State Alaska Aleutian Is.
General locality Aleutian Islands Unalaska I.
Locality South Coast Unalaska Island, Protection Bight Eastward
and Staraya Bays.
Scale 1:20,000 Date of survey July--Sept., 1939
Vessel SURVEYOR
Chief of party R. L. Schoppe
Surveyed by E. B. Roberts
Inked by E. B. Roberts
Heights in feet above H.W. _____ to ground ~~to tops of trees~~
~~Contour. Approximate contour.~~ Form line interval 100 feet
Instructions dated Feb. 3, 1938, 19____
Remarks: _____

Date of Instructions: 2/3/38

General description of the Coast:

The coast is essentially bold. Parallel mountain ridges protruding from a high interior mountain mass in a direction normal to the trend of the coast terminate in deeply eroded cliffs. Kayak Cape is a seaward extension of one such ridge. The valleys between the ridges have partially filled with detritus, forming a series of bights and bays having shingle beaches at their heads (sand in the case of Protection ^{Bay} Bight). Behind these beaches are grassy flats and in all but one case, lagoons. The two eastern valleys are amphitheater-like, whereas the others penetrate deeply into the mountains, as much as four miles or more in the case of Staraya Bay. Except in the beach areas the shores are foul, above and below the HW line, with boulders fallen from above.

Kayak Cape is the outstanding feature of the area. It is a remnant of an area of tumbled hills up to 1400 feet elevation, cut away on all sides in almost vertical cliffs, which intersect the rolling topography at entire random. The result is a high, steep-sided mass topped by hanging valleys, remnants of various slopes and parts of hills, the effect being most unusual and interesting. Both sides of the cape display a conspicuous black stratum, nearly horizontal and about 400 feet high at the point of the cape, which should facilitate identification when the overcast is not too low.

The headland at the east limit of the sheet has a knife-like ridge, and side slopes like those of a steep-pitched roof. There is a 15-foot rock (station Ledge, 1935) 200 meters off this point, easily distinguished from either direction along the coast, but not from abreast. Inshore of the rock are extensive ledges.

To the westward are, in order, an insignificant bight and two bays about a mile deep, separated by headlands having moderately serrated ridges, and regularly sloping sides, except where intersected by cliffs. Near the outer end of the east shore of the westernmost of these three bights (the first east of Staraya Bay) is a natural rock bridge. It arches out from the cliff, spans the beach, and foots in the shallow water off the beach. The span is perhaps fifty feet, and the height under the arch about the same. The outer end of the same headland has ledges extending 200 meters offshore.

Staraya Bay has Kayak Cape to its southward, and a bold headland to the north and east, in which are easily seen the remnants of volcanic craters. This bay has a shingle beach of unusual length and height (20-25 feet), and a large lagoon behind the beach. West of Kayak Cape is Protection ^{Bay} Bight, which has a sand beach and a large marshy flat with lagoons behind the beach.

The general area of the sheet consists of sharply tilted and folded strata of vari-colored igneous rock, much pierced by dikes and seams. Of geologically recent nature, this land is undergoing active erosion, and is exceedingly rugged and broken. The rock and boulder areas, except on cliffs and the steeper slopes, and the upper parts of the mountains, are overlain by a sod of moss and vegetable mold, in which grow luxuriant grasses and wild flowers. The grass is green from ~~March~~ June to September, otherwise brown. There are no trees nor bushes, nor any appreciable soil.

The mountain masses inland from the coast consist entirely of recognizable remnants of volcanos. At the extreme western end of the sheet the form lines indicate a mountain mass which culminates just off the sheet at Lat. 53-39, Long. 166-41.4, in a peak of more than 3700 feet, one of the highest points in this part of Unalaska Island. ✓

Landmarks:

Other than Kayak Cape, as described, there are no landmarks of note, except possibly the large cascade on the west shore of Protection ~~Bight~~ ^{Bay}. This, however, cannot be seen except from within the bay or from a southeasterly direction past Kayak Cape. The mountain peaks are confused and can be identified only by reference to the chart. ✓

Control used:

Seven triangulation stations on the coast gave suitable distribution of control. ✓

Traverses:

The adequacy of triangulation control made unnecessary the running of any but insignificant traverses, in which no closure errors were noted. ✓

Auxiliary methods:

None were employed except the use of sextant cuts from offshore in the location of certain mountain peaks. ✓

Form Line Verification:

The sketching of the form lines was verified by scrutiny from offshore, as well as by stereoscopic examination of air photos. ✓

Form line topography was completed to the limits of area visible from the coast or from offshore. A slight extension beyond the visible area was made without vertical control to a juncture with previous work at the north corner of the sheet, the 500-foot contours being indicated by dotted lines from study of the photos. ✓

Along the northwest limits of the form line area, a considerable gap lies between this work and existing work in the vicinity of Beaver Inlet. If it is considered desirable to close this gap, it is suggested that the available air-photos could be used for a compilation by aerocartograph or otherwise. This could not be attempted in the field. ✓

New names:

No new names, it being considered undesirable to invent arbitrary new names for features not having much use at present. Such names are employed are adopted from usages established in previous seasons by the SURVEYOR. The nomenclature has recently been in some confusion, and a letter was transmitted on October 10, 1939, to clear up this confusion and recommend some slight changes. The nomenclature is in accordance with the letter referred to. ✓

Plane Table Positions:

appended

There are ~~appended descriptions~~ on form 524 descriptions

of the following recoverable points: Num, Dap, Lob, Cob, and Rat. There are no prominent and easily identifiable objects in the area, except peaks possibly identifiable by reference to the chart. Filed in
Air Photo
Section

Photographs:

Photographs are submitted as follows:

- 1--East shore near head of 1st bay east of Staraya Bay. ✓
- 2--East shore Kayak Cape, looking NW, showing black stratum.

Statistics:

Statute miles shoreline, 21.6
Square statute miles topography, 27.3

Submitted,

E. B. Roberts

E. B. Roberts,
H. & G. Engineer.

Approved
Forwarded,

R. L. Schoppe

R. L. Schoppe,
H. & G. Engineer,
Commanding, SURVEYOR

Photographs illustrative of coast, topographic sheet No. (field)
D-39.



1-- East shore near head of 1st bay east of Staraya Bay.



2-- East shore Kayak Cape, looking NW, showing black stratum.

Remarks

Decisions

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GEOGRAPHIC NAMES

Survey No.

T6721

Name on Survey

	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	
A,	B,	C,	D	E	F	G	H	K	
^a <u>Straya Bay</u>									1
<u>Protection Right Bay</u>									2
<u>Kayak Cape</u>									3
<u>Unalaska Island</u>									4
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Names underlined in red approved

by L. Heck on 5/4/40

MEMORANDUM

IMMEDIATE ATTENTION

SURVEY
DESCRIPTIVE REPORT
PHOTOSTAT OF

~~No. 11~~

No. T

T6721

Confidential

received April 18, 1940
registered April 30, 1940
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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25	✓	HBC	Pages 1 & 2 and photos on last page
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RETURN TO

82	T. B. Reed
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✓ HBC

DIVISION OF CHARTS

Section of Field Records

REVIEW OF TOPOGRAPHIC SURVEY NO. 6721 (1939) FIELD NO. D-39

Aleutian Islands; Unalaska Island;

Protection and Staraya Bays

Surveyed in July - September 1939, Scale 1:20,000

Instructions dated February 3, 1938 (SURVEYOR)

Plane Table Survey

Aluminum Mounted

Chief of Party - R. L. Schoppe.

Surveyed and inked by - E. B. Roberts.

Reviewed by - J. A. McCormick, October 3, 1940.

Inspected by - H. R. Edmonston.

1. Junctions with Contemporary Surveys.

Satisfactory junctions were made with T-6720 (1939) on the west, T-6722 (1939) on the east and T-6432 (1935) on the northeast. There is a gap between form lines on the northwest portion of the present survey and those of surveys on the northern side of the island but the U. S. Army is now compiling form lines of the entire island from air photographs.

2. Comparison with Prior Surveys.

The Coast and Geodetic Survey has made no previous topographic surveys of this area.

3. Comparison with Chart 8860 (New Print of July 13, 1939)

Superseded topography now charted in this area is from sketched information on H-5972 (1935), offshore hydrographic survey. The sketching was very good.

4. Condition of Surveys.

Satisfactory.

5. Compliance with Instructions for the Project.

Satisfactory.

6. Additional Field Work Recommended.

None

7. Superseded Surveys.

None.

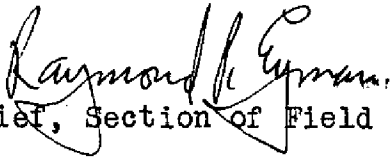
Examined and approved:



Thos. B. Reed,
Chief, Section of Field Records.



Chief, Division of Charts.



Chief, Section of Field Work.



Chief, Division of H. & T.