

6600

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

DESCRIPTIVE REPORT

Topographic ~~Hydrographic~~ Sheet No. UE-37

State Aleutian Islands
~~ALASKA~~

LOCALITY
ALEUTIAN ISLANDS
UNALASKA ISLAND
KULILIAC AND EAGLE BAYS

1937
CHIEF OF PARTY
A. M. SOBIERALSKI.

U. S. COAST & GEODETIC SURVEY
LIBRARY AND ARCHIVES

APR 19 1938

Acc. No. _____

U. S. GOVERNMENT PRINTING OFFICE

DECLASSIFICATION BY NOAA

PURSUANT TO DOC SYSTEMATIC REVIEW

GUIDELINES AS DESCRIBED IN SECTION

3.3 (a), EXECUTIVE ORDER 12356

(prior to review)
Applied to Chart Compilation 9022, Nov. 16, 1938 H. E. MacIsaac

Applied to Chart Comp. 9020 Aug. Sept 1939 L. A. M.

Applied to Chart Comp. 9019 October 1940 L. A. M.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

TOPOGRAPHIC TITLE SHEET

U. S. COAST & GEODETIC SURVEY
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APR 20 1938

REG. NO.

Acc. No.

The Topographic Sheet should be accompanied by this form,
filled in as completely as possible, when the sheet is for-
warded to the Office.

Field Letter UE-37

REGISTER NO.

State ~~ALASKA~~ ALEUTIAN ISLANDSGeneral locality UNALASKA ISLANDLocality KULILIAK AND EAGLE BAYSScale 1:20,000 Date of survey June, July & Aug., 1937Vessel U. S. C. & G. S. S. SURVEYORChief of Party A. M. SOBIERALSKISurveyed by J. C. Tison, Jr.Inked by J. C. Tison, Jr.Heights in feet above M. H. W. to ground ~~to tops of trees~~~~Contours Approximate contours~~ Form line interval 100 feetInstructions dated April 13, 1934

Remarks:

1.

DESCRIPTIVE REPORT

to accompany

TOPOGRAPHIC SHEET UE - 37

KULILIAK AND EAGLE BAYS

SEASON 1937

INSTRUCTIONS

The work was executed under the Director's Instructions dated April 13, 1934.

EXTENT OF SURVEY

This sheet covers the south coast of Unalaska Island between Long. 166°-54.0' W. and Long. 167°-04.1' W, including all of Eagle Bay and the outer part of Kuliliak Bay. It also covers the interior of the island between the above meridians from the coast northward to the vicinity of Lat. 58°-31' N.

GENERAL DESCRIPTION

The shoreline shown on this sheet is very rocky and ragged and characterized by rocky cliffs of varying heights rising immediately back of the high water line. Numerous off-lying rocks, narrow rock reefs, and rocks awash lie outside the high water line. The interior of the island is very rugged in this vicinity except to the west and northwest of Kuliliak Bay, where the jumbled mountain peaks and sharp ridges which characterize most of the area give way to rolling hills, wide valleys, and more or less detached peaks. The area is generally entirely grass covered except for rock outcroppings.

Eagle Bay is characterized by a particularly rugged and precipitous shoreline. High rock cliffs rise directly from the high water line in most parts of the Bay and even where cliffs do not exist, the rise is very steep and broken. The numerous islands located near the head of the northwest arm are flat and grass covered on top with steep rocky sides rising directly from the water. They are used as nesting places by many birds during the summer months. The point of land dividing the head of the Bay into two arms, which was called Snipe Point by the survey party, is very rugged at its southern tip and quite rough and weathered on top. The east side of the entrance to the Bay is marked by a very sharp pinnacle rock, 100 feet in height and located about 100 meters offshore. The rock was called Needle Rock by the survey party. The west side of the entrance is marked by a low flat reef, awash at high water, which extends 350 meters offshore from the SE side of East Cape. This reef, because of breakers at any stage of tide which make it plainly visible, was called Wash Reef by the survey party. The rugged country around Eagle Bay causes violent "willi-waws" in northerly, northwesterly, and easterly weather.

see geog-
raphic name
sheet.

The point of land or headland lying between Eagle Bay and Kuliliak Bay, and charted as "~~Eagle Point~~ ^{East Cape}", is very rugged at its southern end and distinguished by two very prominent mountain peaks. The southerly peak, located at the extreme south end of the point, appears conical in shape with a very sharp top when viewed from the south; but from east or west it appears flat on top with a sharp rock peak at the south end of the flat portion. The northerly peak appears pyramidal in shape from all directions and has a bare rock top. The blunt southern face of the headland is very weathered, with high rock cliffs, numerous slides, and many pinnacle rocks along the shoreline.

The shoreline of the outer part of Kuliliak Bay is entirely ringed with rock cliffs except for that part at the head of the deep bight located in the northeast corner. Steep grass bluffs from 20 to 40 feet high lie next the sand beach at the head of this bight. A low valley extends westward to Eagle Bay from the head of the bight. The long narrow point of land separating outer Kuliliak Bay from the inner bay, and called ~~Point Divide~~ ^{Repetition Point} by the survey party, appears gently rolling on top when viewed from the outer bay.

CONTROL

The topographic survey was controlled by second and third order triangulation stations established in 1935.

SURVEYING METHODS

The location and distribution of control points made it possible to locate plane table positions by solution of the three point problem in many instances. A combination of traversing and resecting was also used extensively throughout the survey. Where traverses alone were used, they were in all cases short and closed with no appreciable error.

A closed traverse loop was run in the northwest arm of Eagle Bay from triangulation station Flat 1935 clockwise around the Arm to hydrographic signal "HI". This signal had been previously located from a rod reading taken while set up at station Flat, and from two intersecting cuts obtained from set-ups in the outer portion of the Bay.

Short traverses were also used in the northeast arm of Eagle Bay; by running between hydrographic signals previously located by strong intersections of cuts taken from plane table positions in the outer portion of the Bay.

All off-lying features were located either by direct rod readings or by intersecting cuts giving a strong location.

FORM LINES

All form lines on the sheet are from elevations obtained with the plane table and alidade. No verifications were made from offshore. Elevations shown on the sheet were located by two or more intersecting cuts obtained from widely separated plane table positions. In most instances two or more vertical angles were used in determining the elevations.

3

The location of peaks, streams, ridges and valleys in the area north and northeast of inner Kuliliak Bay is largely from Air Photo Compilation #2 (season 1936), supplemented by cuts taken while executing this survey. Elevations in this area were all determined during the 1937 season, and it was found necessary to revise some of the form lines as originally submitted for Air Photo Compilation #2 in 1936. Form lines as shown on this topographic sheet are correct, and those on Air Photo Compilation #2 (1936) which extend beyond a junction with this sheet should be disregarded.

JUNCTIONS WITH OTHER SURVEYS

This sheet joins ~~Topographic Sheet UK - 37~~ ^{T-6640} on the west. A junction along the shoreline was effected at signal PUK, which was located on this sheet by a short traverse run westward from Δ station KULIAK 1935. The position of PUK so obtained was transferred to Sheet ~~UK - 37~~ ^{T-6640} and checked on that sheet by a traverse run eastward from triangulation station JEAN 1937.

On the north and west this sheet joins Air Photo Compilation #2 (1936). Such topographic detail as streams and lakes was transferred to this sheet from the compilation, and the compilation was also used extensively in locating valleys, ridges, and peaks for form lining. Numerous additional elevations were obtained on this sheet for a part of the area previously form lined on the Air Photo Compilation, and it was found necessary to revise some of the form lines as originally submitted on the Compilation. A tracing of Air Photo Compilation #2 (1936) will be submitted to show this revision. The form lines as drawn on this topographic sheet are to be regarded as correct, and those on the compilation south of the junction with this sheet should be obliterated.

The shoreline of the inner part of Kuliliak Bay and of the entrance to the inner Bay was surveyed on Topographic Sheet #UA-37 ^(T-6594) to a 1:10,000 scale. A junction with that sheet was effected at hydrographic signal NOW and at signal OLD. The positions of these signals was determined separately on either sheet and then checked against each other; with no difference in location apparent.

^(H-6378-1938) Hydrographic work accomplished on Hydrographic Sheet #2537 during the past season showed no disagreements with topographic detail in outer Kuliliak Bay and along the shoreline of ~~East Cape~~ ^{Eagle Point}.

COMPARISON WITH EXISTING CHARTS

A comparison with Charts #9196 and #8802 shows a considerable difference in the configuration of Kuliliak and Eagle Bays as regards detail of shoreline, but the general shape and indication of important features agrees with the charts.

NAMES ✓ GHE

The names Kuliliak Bay and East Cape are from Chart #9196. The names Eagle Bay, Kuliliak Bay, Unalaska Island, and Pacific Ocean are from Chart #8802.

4

The following new names, which have not hitherto appeared on charts, were assigned during the past season while executing this survey of the Area:

1. ~~Point Divide~~ ^{Repetition Pt.} - to the narrow point or ridge of land which extends westward from the east side of Kuliliak Bay and divides the Bay into its outer and inner parts.
2. Anchorage Bight - to the deep bight located in the northeast corner of outer Kuliliak Bay. The bight affords the best anchorage available in the outer Bay. (Part of Kuliliak Bay)
3. Snipe Point - to the rugged point of land which divides the head of Eagle Bay into two arms. The name was suggested by the large number of Russian Snipe which were noted along the shoreline of the point, and has no other significance.
4. ~~Needle Rock~~ ^{Spire} - to the sharp and very slender pinnacle rock located at the east side of the entrance to Eagle Bay. Triangulation Station PINN 1935 is located on the base of this rock. The name was suggested by the shape of the rock.
5. Gull Rock - to the large flat-topped offshore rock located on the west side of Eagle Bay just inside the entrance. The name was suggested by the large number of sea gulls which nest on and inhabit the rock during the summer months. See Geographic name sheet.
6. ~~Wash~~ ^{Label} Reef - to the flat rock reef located offshore on the southeast side of East Cape at the west side of the entrance to Eagle Bay. The reef is continuously washed by surf at all stages of tide.

CHARACTER OF MARSHES

All marshes shown on the sheet are of the fresh water variety.

STATISTICS

Statute miles of shoreline	25
Area in square statute miles	26

Approved and forwarded:

A. M. Sobieralski
A. M. SOBIERALSKI
Chief of Party

Respectfully submitted :

James C. Tison, Jr.
James C. Tison, Jr.
Fr. H.&G.E.

SUPPLEMENTARY NOTE

to accompany

DESCRIPTIVE REPORTTOPOGRAPHIC SHEET FIELD NO. UE-37 T-6600DELINIATION OF ROCKY LEDGES OR REEFS:

The conventional symbol for rocky ledges or reefs is not used on this sheet. A dashed line to show the outer limits of reefs which bare or are awash at ^{some} any stage of tide is used instead. This dashed line is the low water line.

Reefs indicated on this sheet appear to be the result of lava flow. They are generally flat on top with clearly defined edges dropping off abruptly into varying depths of water. This characteristic made it possible to clearly outline all reef limits with actual rod readings taken in the field. The limits were easily identifiable regardless of stage of tide.

Those reefs or ledges which line the shoreline slope very gradually upward toward the high water line from their outer edges, which are generally awash at MLLW. Broken rocks and boulders are strewn on the reefs in the vicinity of the high water line, forming a rocky beach.

Offshore reefs are consistently level on top and are just awash at MHW unless otherwise indicated.

Respectfully submitted:

James C. Tison, Jr.
James C. Tison, Jr.
Sr. H. & G. E.

Approved and forwarded:

A. M. Sobieralski
A. M. Sobieralski,
Chief of Party.

Remarks

Decisions

1		see T-
2		USGB decision
3		see H-6241
4		" "
5	Assigned by Field Party	submitted to USGB for decision
6	" " " "	submitted to USGB. decision
7	A part of Outer Kuliliak Bay	
8	Charted on 9196	
9	Assigned by Field Party - too many duplications	
10	Assigned by Field Party - (Adesc. term)	submitted to USGB decision May, '39
11	Assigned by Field Party - there is a Needle Rk. in Unalaska Bay	USGB decision May " " 1939
12	Also The Needles - Umnak I.	
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GEOGRAPHIC NAMES

Survey No. T-6600

Name on Survey	GEOGRAPHIC NAMES									
	Survey No. T-6600									
	On Chart No. 8802, 9196	On previous survey No.	On U. S. quadrangle Maps	From local information	On local Maps Baker Dict	P. O. Guide or Map	Rand McNally Atlas	U. S. Light List		
A,	B,	C,	D	E	F	G	H	K		
<u>Pumicestone Bay</u>	✓									1
<u>Unalaska Island</u>	✓									2
<u>Kuliliak Bay</u>	✓									3
<u>Eagle Bay</u>	✓									4
<u>Snipe Point</u>										5
<u>Repetition Point</u>										6
<u>Point Divide</u>										7
<u>Anchor Point</u>										8
<u>Eagle Point</u>										9
<u>East Cape</u>	9196									10
<u>Gull Rock</u>										11
<u>Label</u>										12
<u>Wash Reef</u>										13
<u>Spire</u>										14
<u>Needle Rock</u>										15
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Names underlined in red approved

by GHE on 5/31/38

M 234 V10

Names underlined in red approved
by GHE on 5/31/38

MEMORANDUM

IMMEDIATE ATTENTION

SURVEY
DESCRIPTIVE REPORT
~~PHOTOGRAPHIC~~

~~XXXX~~

No. T -6600

{ received April 19, 1938
registered May 24, 1938
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

82	T. B. Reed
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✓ TBR

Section of Field Records

REVIEW OF TOPOGRAPHIC SURVEY NO. 6600 (1937) FIELD NO. UE37

Kuliliak and Eagle Bays Unalaska Island, Aleutian Islands.
Surveyed in June, July and Aug. 1937, Scale 1:20,000
Instructions dated April 15, 1934 (SURVEYOR)

Plane Table Survey.

Aluminum Mounted.

Chief of Party - A. M. Sobieralski
Surveyed by - J. C. Tison Jr.
Inked by - J. C. Tison Jr.

1. Junctions with Contemporary Surveys.

The junctions with T-6639 (1938) on the east, T-6640 (1937-38) on the west and T-6594 (1937) in Kuliliak Bay are satisfactory.

This survey, at its northern limits, makes a satisfactory junction with the form lines on the paper tracing submitted with T-5270 (Air Photo Compilation No. 2-1936). In the overlapping area the form lines on T-6600 (1937) should be used instead of those on the paper tracing for reasons stated on page 3 of the Descriptive Report.

2. Comparison With Prior Surveys.

No prior topographic surveys have been made by this Bureau in this area.

3. Comparison With Chart No. 9196 (New Print dated July 18, 1939)
Chart No. 8802 (New Print dated November 3, 1938)


Topographic information shown on the chart originated with Russian authority. The small scale makes a detailed comparison with the present survey of little value. The charts show no information in this area which needs to be retained.

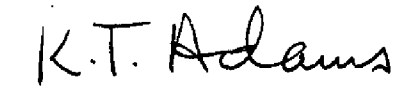
4. Condition of Survey.

- a. Definitely located rocks shown by the rock awash symbol or the sunken rock symbol were encircled by dashed lines instead of dotted lines. (Par. 39 of the Topographic Manual). These were not changed in the office.
- b. Some of the geographic names were inked by the field draftsman instead of being left in pencil for verification in the office (Field Memorandum No. 4 1935).
- c. A dashed line instead of the standard ledge symbol was used to represent the outer limits of ledges bare or awash at low water (Par. 39 of the Topographic Manual). The symbol was not altered in the office but an explanatory note was placed on the topographic sheet.


- d. There is a difference of about 3° in the observations for magnetic declination at triangulation station POINT in Lat. $53^{\circ}25.48'$, Long. $167^{\circ}58.87'$ and triangulation station PINN in Lat. $53^{\circ}26.54'$, Long. $166^{\circ}55.75'$. These stations are only about two miles apart; the difference is probably due to local attraction. This matter has been reported to the Division of T.M.&S.
- e. The field drafting is satisfactory.
- 5. Compliance with Instructions for the Project.
The survey satisfies the instructions for the project.
- 6. Additional Field Work Recommended.
No additional field work is required.
- 7. Reviewed by Leo S. Straw, September 6, 1939.
- 8. Inspected by H. R. Edmonston, September 29, 1939

Examined & Approved:


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


K. T. Adams
Chief, Division of Charts.


Fred. L. Peacock
Chief, Section of Field Work.


G. W. Hude
Chief, Division of H. & T.