DESCRIPTIVE REPORT

Topographic
Hydrographic

Sheet No. A-40

U. S. COAST & GEODETIC SURVEY

LIBRARY AND ARCHIVES

MAR 3 1941

State
Alaska

LOCALITY

Aleutian Islands

Uliaga & Northern part of Kaganil Island; Islands of Four Mountains

191 40.

CHIEF OF PARTY

J. H. Peters
DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY

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. A-40

REGISTER NO. T 6743

State Aleutian Islands, Alaska

General locality Islands of Four Mountains

Locality Uliaga & Northern part of Kagamil Island

Scale 1:20,000 Date of survey June, July, 1940.

Vessel U.S.C.G.S.S. EXPLORER

Chief of party J. H. Peters

Surveyed by H. A. Paton

Inked by H. A. Paton

Heights in feet above H.W. to ground

Contour Approximate contour, Form line interval 100 feet

Instructions dated February 3, 1938

Remarks

...
DESCRIPTIVE REPORT

TO ACCOMPANY SHEET A-40

PROJECT NO. HT-218

ULIAGA AND NORTHERN PART OF KAGAMIL ISLANDS

ISLANDS OF FOUR MOUNTAINS

ALEUTIAN ISLANDS, ALASKA

U.S.C. & G.S.S. EXPLORER

J. H. Peters, Comdg.
DESCRIPTIVE REPORT
TO ACCOMPANY SHEET A-40
PROJECT NO. HT-218
ULIAGA AND NORTHERN PART OF KAGAMIL ISLAND
ISLANDS OF FOUR MOUNTAINS
ALEUTIAN ISLANDS, ALASKA
U.S.C. & G.S.S. EXPLORER
J. H. Peters, Comdg.

INSTRUCTIONS:

The work on this sheet was done under authority granted by orders
dated February 21, 1940, which referred to instructions dated February
3, 1938, issued to the SURVEYOR and PIONEER.

SCOPE:

This sheet is a survey of all of Uliaga Island and the north
half of Kagamil Island.

CONTROL:

The control consisted of nine triangulation stations established
in 1938 by the PIONEER and six established in 1940 by the E. LESTER
JONES. Signals were built on all stations not sufficiently well de-
dined by the nature of the object. The stations were well distributed
and all checked satisfactorily. They were computed on the Unalaska
1901 Datum. See a discussion of the correct name for the datum in
the descriptive report accompanying Sheet A-39. An additional station
on the northeast side of Uliaga Island would have been a valuable
aid to the work but there was no feasible means to establish one in
that vicinity.

METHODS:

The survey was begun at Station "MAX", and a traverse run to
Signal "BOND". At Signal "MILD", a resection on Station "CONE",
gave a check on the distance. Signal "BOND", was located by sextant
cuts which indicated zero closure for the traverse. The remaining
shoreline to Station "WAL" was located by means of a magnetic tra-
verse which was sufficiently for this short distance. Graphic tri-
angulation was used to locate all signals between Stations "MAX" and
"BEN", on Kagamil Island and from Station "ROSS" to Signal "GENT" on
Uliaga Island. A short traverse was made from Station "BEN" to Station "GAM", with zero closure.

From Signal "Cen" to Station "JOE", it was necessary to run a two and one-half mile traverse around the north end of Uliaga Island. This traverse failed to close by five meters which was adjusted in accordance with usual methods. The remaining shoreline between Stations "JOE" and "ROSS", was sufficiently well controlled by graphic triangulation to close without error. Form lines were located by plane table methods and by sextant cuts taken from the ship.

MAGNETICS:

The magnetic declination was determined with the declinatoire with the following results:

At Station BEN 13° 58' E.
At Station KEG 14° 32' E.
At Station MAX 14° 06' E.
At Signal Mit 17° 00' E.

At Signal "End" the declinatoire indicated a declination of 12° East (at 2:00 P.M. on June 27, 1940) but since the control was weak it was not shown on the sheet. Another value obtained at Signal "Bond" (at 3:23 P.M. on June 12, 1940) was 13° 10' East, which was not shown for the same reason.

DESCRIPTION OF SHORELINE:

The northern part of Kagemil Island consists of three valleys separated by ridges. The eastern valley is the largest of the three and is drained by two small streams which almost join at the shore near Signal "Log". The valley is quite flat and covered with grass.

The northern valley, the smallest of the three, is circular in shape and might be the eroded remnants of an old crater. One small permanent stream and another intermittent stream drain this valley. It is probably the best camp site on the island.

The third valley is on the west side of the island and is drained by the largest stream found on this island. The valley is narrow; extends easterly about one mile and then turns north for another mile. Mr. Paul Willis of Dutch Harbor, owner of the fox lease for these two islands, says there is a small lake in this valley. The stream is too small to permit salmon to spawn in it. Most of the shoreline around this part of Kagemil is bordered by cliffs of varying heights.
These cliffs are composed of bare rock except between Signals "Rare" and "Coat", where they are grass covered bluffs. In this section there is a flat lava outcrop along the shore below the bluffs. Between Signals "Wax" and "Alv", there is a boulder beach. Between Signals "Boat" and "Miss", is found the only sand beach on the entire sheet.

Candlestick Point is one of the most striking geographical features found in this group of islands. There are ten tall pinnacle rocks found in this vicinity, the tallest of which is one hundred and fifty-six feet in height. Directly behind this pinnacle is a long thin wall of rock, three hundred fifteen feet in height which has a seventy-five foot arch worn through it. Five hundred meters southwest of this arch is a five hundred ninety-one foot detached spur shaped like a Scotch bonnet, (Signal Bon). Beneath this spur is a conspicuous smooth red cliff. High cliffs border the shore to the south. A conspicuous dike of grey rock forms a series of pinnacles above and behind the cliff, the southernmost one being Signal "Nic".

A prominent cliff on the west side of Kagemil begins near Signal "Bea", and extends southward on to Sheet B-40. This cliff varies from three to five hundred feet in height and is almost vertical. Behind the cliff is a smooth table-land extending to the foot of the steep cone forming Kagemil Peak.

Uliaga Island consists of one central mountain peak with a few prominent spurs. The crest of the peak consists of two points, one sharp and the other, a larger flat point to the northwest which is but slightly lower. The northwest side of the peak is very steep, bare, and heavily eroded.

The cove on the north end of the island is full of kelp and affords poor protection for small boats. The cape forming the east side of the cove is covered with a rough lava outcrop with a sharp narrow ridge leading down to it. The west side of the cove is a rock wall three hundred forty feet in height. The largest stream on the island empties between Signals "Poy" and "Mut".

Station "Jos", is a sharp needle-like pinnacle, sixty-five feet in height which has another point twenty feet in height. A table setup was found on a small shelf on the south side of the rock about six feet above the water. The west corner of the island is a long narrow ribbon of lava extending down to the shore. This type of formation is quite common in this group of islands.

The best landing site on the island is on a boulder beach behind
a barrier of kelp near Signal "Cabin". This cabin was built for the use of fox trappers and is occupied during the winter of some years. There were no other houses of any kind on this sheet.

The small lake west of Station "ULIAGA", is only an approximate location.

Signal "Foot", is a prominent scar in the low grass bluff bordering the shore.

Signal "For", is a forty foot pinnacle rock at the south end of a boulder beach.

Signal "Her", is a sharp spur, nine hundred Fifty-six feet high.

Station "SAD", is the southern one of three peaks on a ridge making out from the central peak, and forms a good landmark.

**GEOGRAPHIC NAMES:**

See Descriptive Report accompanying Sheet A-39, for a general discussion of the source of Geographic Names. The following names were originated by the survey party:

Uliaga Pass - the water between Uliaga and Kagamil Islands.

Candlestick Point - The northwest corner of Kagamil Island, descriptive of the ten pinnacle rocks found there.

North Cove - The small cove on the north side of Kagamil Island. It is the most protected anchorage on the sheet.

The names Uliaga Island and Kagamil Island were taken from the chart. Uliaga Island is pronounced Eliga and Uliga by some of the people in Dutch Harbor and Unalaska but there is no one pronunciation sufficiently common to warrant a change.

**DANGERS:**

Kelp is found close inshore around most of these islands. Kelp and swirls were seen about two hundred meters north of Station "MAX". A rock awash at M.L.L.W. was located about five hundred fifty meters southwest of signal "Wag", and another rock which bares three feet at M.L.L.W. was located about four hundred meters northeast of Signal "Tru", well outside of the thick kelp near shore. Moderate tide rips were encountered about one-half mile off shore along the northeast
side of Kagamil. They approach the shore near Station "WALK". Tide rips are found in Uliaga Pass occasionally.

TIDE GAGE SITE:

The best tide gage site was found in North Cove on the south side of the pinnacle rock on which Signal "N" was located.

COMPARISON WITH PREVIOUS SURVEYS:

The previous survey as shown on Chart No. 8802 show the islands from two to four miles east of their correct position and the general outline was quite erroneous. The off-shore pinnacle on which Station "JOE", is located is northwest of Uliaga Island instead of north of it as shown on the Chart. The mountain on Kagamil Island is not a long high ridge as shown on the Chart, but instead it is a tall conical peak on the south end (see Sheet B-40) and lower branching ridges on the north end.

In 1938 the triangulation party on the PIONEER, determined the height of several stations. Their values compare with the elevations determined by plane table as follows:

<table>
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<tr>
<th>POINT</th>
<th>ELEVATION BY TRIANGULATION</th>
<th>TOPOGRAPHY</th>
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<tr>
<td>Uliaga Peak</td>
<td>2915</td>
<td>2910</td>
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<tr>
<td>Sad</td>
<td>1290</td>
<td>1285</td>
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<tr>
<td>Uliaga</td>
<td>848</td>
<td>845</td>
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</table>

WILDLIFE:

These two islands are leased by Mr. Paul Willis of Dutch Harbor, who has planted blue foxes on them. None of them were seen by the survey party. About fifty hair seals were seen along the northwest coast of Uliaga. A favorite shelf for several large sea lions is in the vicinity of Signal "H1".

STATISTICS:

Statute miles of shore line 19.2
Area in square statute miles 7.8
Respectfully submitted,

Hubert A. Paton
Hubert A. Paton,
Lieutenant, C. & G. S.

APPROVED AND FORWARDED:

[Signature]
J. H. Peters,
Chief of Party, C. & G. S.,
Commanding Ship EXPLORER.

[Signature]
Forwarded:
Geo. R. Bean
Office in Charge,
Scuttle Breaching Office.
TO BE CHARTED { STRIKE OUT ONE

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

LANDMARKS FOR CHARTS

Dutch Harbor, Alaska    July 12, 1940

I recommend that the following objects which have (have not) been inspected from seaward to determine their value as landmarks, be charted on (alaska) the charts indicated.

The positions given have been checked after listing.

J. H. Peters  Chief of Party.

<table>
<thead>
<tr>
<th>GENERAL LOCALITY</th>
<th>NAME AND DESCRIPTION</th>
<th>LATITUDE</th>
<th>LONGITUDE</th>
<th>DATUM</th>
<th>METHOD OF LOCATION</th>
<th>DATE OF LOCATION</th>
<th>CHARTS AFFECTED</th>
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<td>CABIN</td>
<td>63 03</td>
<td>903</td>
<td>169 44</td>
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<td>June 1940 x</td>
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<td>TALLEST PINNACLE (SIG. Tall)</td>
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<td>169 44</td>
<td>Unalaska</td>
<td>Topo.</td>
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This form shall be prepared in accordance with 1934 Field Memorandum, "LANDMARKS FOR CHARTS." The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.
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<td>Islands of Four Mountains</td>
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Names underlined in red approved by L. Heck on 2/27/42.
MEMORANDUM
IMMEDIATE ATTENTION

SURVEY DESCRIPTIVE REPORT
PHOTOGRAPH OF

No. 1

received Mar. 3, 1941
registered Mar. 3, 1941
verified
reviewed
approved

T6743
(Confidential)

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.

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RETURN TO

82  T. B. Reed

\[Signature\]
CONFIDENTIAL

DIVISION OF CHARTS
SURVEYS SECTION

REVIEW OF TOPOGRAPHIC SURVEY
ALEUTIAN ISLANDS, ISLANDS OF FOUR MOUNTAINS,
ULIAGA AND NORTHERN PART OF KAGAMIL ISLAND
SURVEYED IN JUNE AND JULY 1940; SCALE 1:20,000
INSTRUCTIONS DATED FEBRUARY 3, 1938

Plane Table Survey

Chief of Party - J. H. Peters
Surveyed by - H. A. Paton
Inked by - H. A. Paton
Reviewed by - R. H. Carstens
Inspected by - H. R. Edmonston

1. Adjoining Surveys
The present survey joins T-6744 (1940) on the south.

2. Comparison with Prior Surveys
There are no prior surveys of the area by this Bureau.

3. Comparison with Chart 8802 (latest print date 1-18-43)
a. Topography
The charted topography originates with the present survey and because of the small scale of the chart only the general outline of the shoreline is shown.

b. Aids to Navigation
There are no charted aids to navigation within the limits of the present survey.

c. Magnetic Meridian
The present survey values of the magnetic meridian differ by 1 to 4 degrees with the charted value, indicating possible local attraction.
4. Condition of Survey

Satisfactory except that rocks baring at MLLW, which have been definitely located, were not shown within a dotted circle.

5. Compliance with Instructions for the Project

Satisfactory except that no report of standardization of the declinatoire was submitted.

6. Additional Field Work Recommended

When the opportunity occurs a further investigation of the local attraction within this area should be made.

7. Superseded Surveys

None.

Examined and approved:

[Signatures]

Chief, Surveys Branch  Chief, Division of Charts

Chief, Section of Hydrography  Chief, Division of Coastal Surveys