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Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey

Topographic

Field No.

Office No.

2659
2659A

LOCALITY

State

Alaska

General locality

Aleutian

Locality

Islands, Kiska

Harbor

1904

CHIEF OF PARTY

Homer A. Ritter

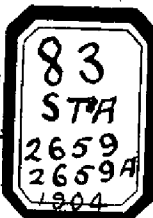
LIBRARY & ARCHIVES

DATE

Office Address

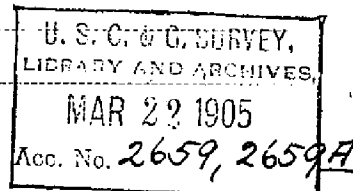
Telegraph Address

Express Office:



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Department of Commerce and Labor
COAST AND GEODETIC SURVEY



11-614

Washington, D.C.
March 22, 1905

~~CONFIDENTIAL~~

Descriptive Report
to accompany
Topographic Sheets No. { 2659
2659a

Homar P. Ritter
ass't. C. & G. Survey.

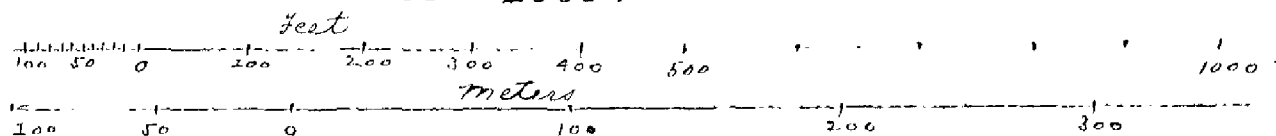
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CONFIDENTIAL

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

2659.Title:

Department of Commerce and Labor
 Coast and Geodetic Survey
 O. H. Tittmann, Superintendent.
 Topographic Survey for U.S. Naval Station
 Kiska Harbor, Aleutian Islands
 Alaska

Scale $\frac{1}{2000}$.

1904

U.S.S. McArthur

Homer O. Ritter, Asst. C. & G. Survey, Commanding.

Planetable survey by H. C. Wenson, Asst.

Triangulation by H. C. Wenson, Asst.; levels and
 cross sections by H. C. Wenson, Asst., L. H. Westdahl,
 1st watch officer and Henry Bernhardt, mate.

Notes.

The survey was made at the request of Lieutenant
 Commander F. H. Sherman, U.S.N., commander of
 naval expedition to Kiska, and in accordance with
 Superintendent's supplementary instructions of
 April 8, 1904.

The plane of reference is mean low water as determined by the U.S.S. Petrel, and corresponds to zero on Petrel tide staff
 U.S.N. B.M. No. 1 corresponds to 9.31 feet on Petrel tide staff

The 10 ft. contours are shown by heavy brown lines.
 " 2 " " " " light " "
 " Location of Test Pits and their numbers are shown in blue.
 " surface elevations of ponds (in feet) " " " red.
 " depths of water in " (" ") " " " black.

Sheet No. 1.

2659^aTitle:

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Scale $\frac{1}{2000}$.

1904.

Notes:

This sheet (no. 2) shows the location ^{and} heights of the cross-section stations on which the plane table topography shown on sheet no. 1. is based—

Cross-section intervals 50 feet.
 The numbers above the stations (in red) correspond to those recorded in the original leveling records.

The elevations (in feet ^{and} tenths.) are shown in black.

Sheet No. 2

Kiska Island:

Kiska Island is one of the Western Aleutian Islands, Alaska.

The island is about 600 nautical miles west of Dutch Harbor and about 200 miles to the eastward of Attu Id., the latter being the westernmost one of the Aleutian Ids.

The distance from San Francisco, Calif. by sea, going by the way of Dutch Harbor and Bering Sea is a little over 2600 miles.

Kiska Island is from 25 to 30 miles long and from 5 to 10 miles wide.

The general trend of the island is northeast and southwest.

The island is mountainous, the general configuration being that of a mountain range which traverses the length of the island from southwest to northeast.

The height of the range varies from 1500 feet in the southern to 4000 feet in the extreme northern end of the island.

A number of transverse valleys several of which extend across the entire width of the island, cut the range.

The most northerly one of the transverse valleys contains a lake or lagoon, and nearly separates the northern end from the main body of the island.

The regularity of the slopes of the separated part of the island, starting from the water on all sides and gradually converging towards the summit, together with a well defined crater at the top, which was visited by a number of persons during the season, indicates the volcanic origin of at least this part of the island.

Dr. J. H. Egbert of the C. G. J. H. Patterson who visited the top of the mountain several times during the season descended into the crater and reported the emission of sulphurous vapors out of crevices in the granite floor of the crater. He also there found a body of mineral sulphur.

The entire island is treeless, but covered in many places with tundra, mosses, lichens, grasses and flowering plants.

The shores of the island are rocky with numerous outlying rocks.

Here and there, in sheltered coves, sand, gravel or shingle beaches of limited extent are found.

The eastern shore of the island is indented by one bay (Kiska Hbr.) and a number of coves.

The western shore I did not visit.

At a number of places small streams empty into the coves and during the salmon season different kinds of salmon and in considerable numbers were seen in these streams and at their mouths.

Owing to the shallowness of the streams it was not difficult to spear the fish and even kick them out of the water; and many of them were.

Although very little driftwood was seen on the shores surrounding Kiska Harbor, in the coves to the southward visited by me considerable driftwood was seen.

All of it was devoid of bark, bleached and weather worn. A number of the pieces examined proved to be conifers.

In one of the small coves south of Kiska Hbr. I counted over one hundred pieces of driftwood, some of the logs having a diameter of several feet.

The island at present is not inhabited, though used by the natives as a stopping place during their periodical journeys between Attu and Atka.

A temporary dwelling place was noticed at the head of Kiska Hbr. on the site of the village occupied by the natives before their removal by the Alaska Commercial Co. some — years ago.

Although numerous waterfowl ^{and} other kinds of birds were seen during the season, no four-footed animals (not counting the dog, 2 pigs, 2 goats ^{just!} and rabbit belonging to the Navy Collier "Saturn") of any kind whatever were found on the island by the Nimrods and other explorers of the party.

The noticed habit of the eider ducks on this island making their nests on the ground in easily accessible and conspicuous places seems to indicate ^{an} immunity from danger or lack of the usual precaution.

Kiska Harbor:

Kiska Hbr. is a small bay which indents the eastern shore of Kiska Island about midway between the northern and southern extremity of the island, and lies between the two headlands known as North Head and South Head.

The bay is about two miles wide at the entrance and extends inland for about the same distance, gradually turning towards the northward and becoming narrower.

The harbor is further protected by Little Kiska Island which lies to the eastward of the bay and in close proximity to the shore of the larger island, and forms two entrances one (known as North Entrance) between North Head ^{and} Little Kiska Head and the other (South Pass) between the western end of Little Kiska Id. and South Head on Kiska Island.

The shores of the bay are rocky with the exception

of a stretch of sand and gravel beach along the western ^{and} northwestern side of the bay.

In the eastern end of the bay the general depth is from 14 to 17 fathoms while in the upper end of the bay and extending a little over $\frac{1}{2}$ a mile out from shore there is an area of considerable extent where the depth is from 4 to 10 fathoms, and the holding ground fair.

The 4 vessels stationed here during the summer anchored in this part of the bay.

A number of small streams having their source in the high land to the westward and northwestward of the bay, enter the bay in this vicinity.

Although the range of the tide is not over 4 feet, southerly and southeasterly gales frequently increase this range considerably.

These same gales also make the bay very rough and make landing on the northern shore of the bay difficult ^{and} dangerous.

During the summer a small landing wharf was built by the Naval Party, in the extreme northern end of the bay, but not having been built strong ^{and} high enough, I surmise that before spring it will be destroyed or washed away by waves.

Between June ^{and} September the fishing in the bay and vicinity was good. The kinds caught ranged from flounder, halibut, cod, rockcod, mackerel, bass, several varieties of salmon, salmon trout, brook trout, ^{and} dog fish to a small whale; the latter having become stranded on shore was pounced upon and shot by the crew of the Patterson.

A few hair seal were also seen. The average weather during June, July, August & September was somewhat disagreeable; storms followed by fog or rain and visa versa.

Topographic Sheet No. 2659.

The topography shown on the sheet comprises the results of a survey made with a view of showing the configuration of the land with sufficient minuteness to furnish data for certain engineering projects contemplated by the Navy Department.

The area surveyed lies along the northern shore of Tiska Harbor.

It extends along the shore for a little over a mile and inland from $\frac{1}{4}$ to $\frac{3}{4}$ of a mile.

Here the topographic features consist of a triangular shaped valley, starting from the shore and extending inland about 2000 feet, and flanked on the western and eastern sides by high land which abruptly breaks off close to the shore forming steep bluffs.

At its head the valley is joined by a narrow gully which extends inland some 2000 or 2500 feet more.

On the westward, about 1000 feet from shore the valley is joined by a similar gully

extending up the mountain side some 2200 feet.

In both of the gullies flow creeks which come together in the center of the valley about 1000 feet from shore and from here on form one stream.

Two smaller gullies having only very small streams in them enter the valley on the eastern side and connect with the main creek.

The floor or bottom of the valley is about 1000 feet wide near shore, but gradually narrows up towards the head where the valley is but 200 to 300 feet wide.

The floor of the valley is comparatively flat with a gradual slope inland.

Near shore the elevation of the valley floor is about 10 feet and at the head of the valley about 20 feet above low water stages in the harbor.

From the floor of the valley the land rises rapidly.

Towards the westward it

ascends towards the high land of the island.

The land shown on the sheet to the eastward of the valley is part of the spur of land, ending in North Head, which separates Kiska Harbor from the body of water adjacent to the eastern shore of Kiska Island.

This spur of land attains in this vicinity an elevation of about 300 feet above the sea and is comparatively flat on top. Numerous small ^{and} shallow lakes or ponds occupy a considerable part of this area.

In front of the valley and stretching across its entire width, with the exception of a narrow cut at its extreme eastern end where the creek cuts through, is a sand ridge or dune.

The base of this ridge is from 150 to 300 feet wide and becomes narrower towards the top. The highest part of the ridge is 60 feet above mean low water in the harbor.

In the southwestern end of the

valley and cut off from the harbor by the sand ridge are two small and shallow ponds.

Shore:

In front of the valley is a smooth sandy beach.

To the westward and eastward of this beach the shore is rocky; perpendicular and precipitous bluffs coming close to shore.

To the eastward this bluff shore extends all the way to North Head.

To the westward the rocky shore extends but a short distance and joins on to another stretch of sand and gravel beach.

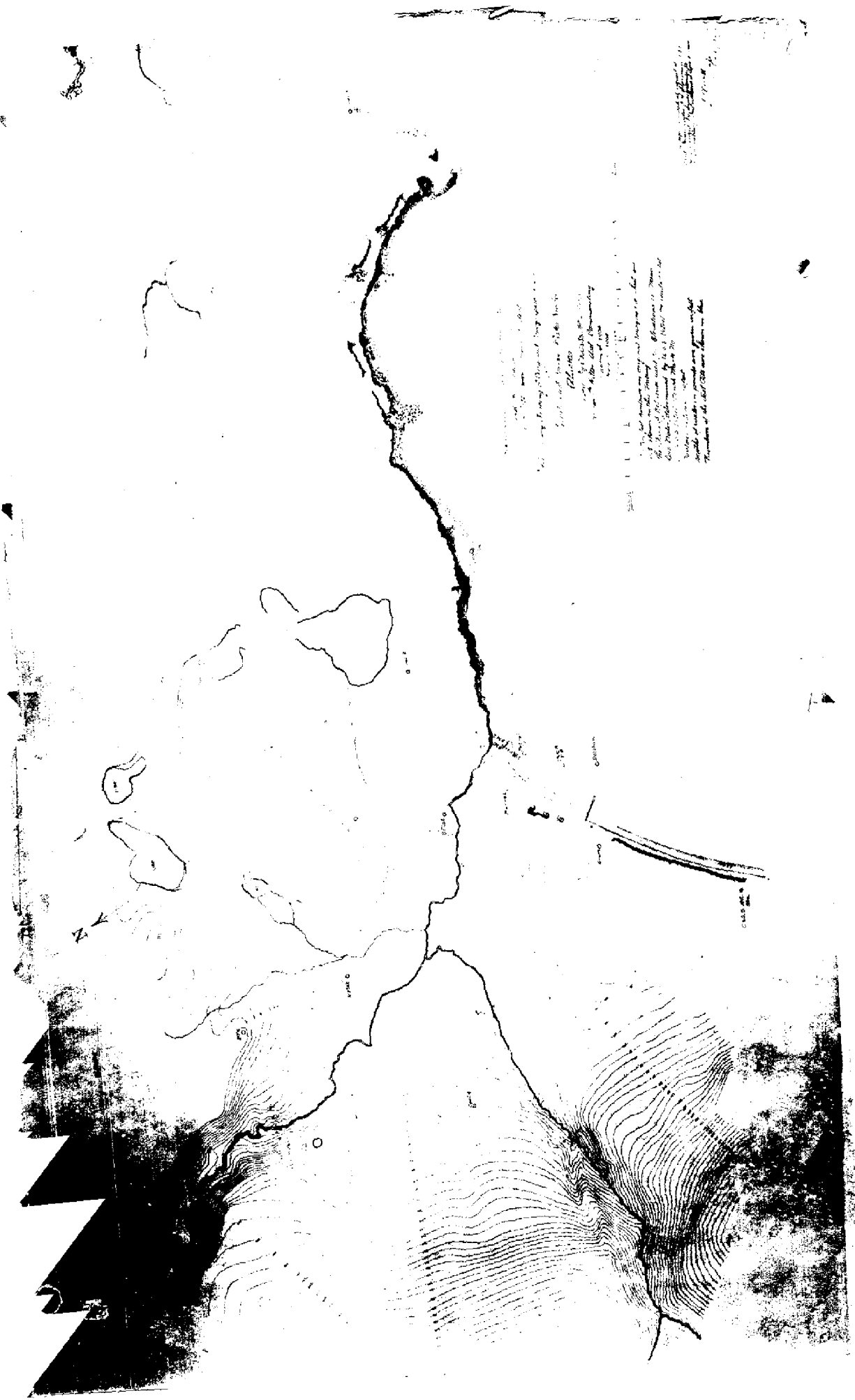
In the immediate vicinity of the valley the material of the rocky bluffs consists of a stratified conglomerate.

This conglomerate is but slightly cemented together and wave action has formed caves along shore.

In this vicinity the conglomerate is overlaid by what appears to have been a volcanic flow; this in turn has been ground down

and smoothed off by glacial action.

That glacial action is responsible for many of the topographic features in this vicinity is quite apparent to the most casual observer.



1. The first boundary was very much irregular in fact and
of the nature of the boundary. It was drawn in the
shape of a line and was not a straight line. It was
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Department of Commerce and Labor
 Coast and Geodetic Survey
 O. N. Ellsworth, Superintendent
 Preliminary Tracing of Original Topographic Survey
 of
 North West Corner, Alaska Harbor
 Alaska
 Surveyed by C. G. S. S. V. S. Fisher
 Homer C. Allen, Asst. Commanding
 Season of 1904
 Scale 1" = 2000
 SCALE OF FEET

The two foot contours on original topographic sheet are
 not shown on this tracing.
 The datum of elevations used, i.e., elevations is Mean
 Low Water, determined by U. S. S. Tidal gauge reads 9.3 feet
 on U. S. S. Tidal gauge No. 1
 Contour interval: 10 feet
 Depths of water in ponds are given in feet
 Numbers of the sheet are shown in blue

This is a copy furnished at request of
 Chief, Bureau of Hydrography, U. S. Navy
 for use in the Hydrographic Survey of Alaska



CROSS HILL
SEA.

Dolphin

0755

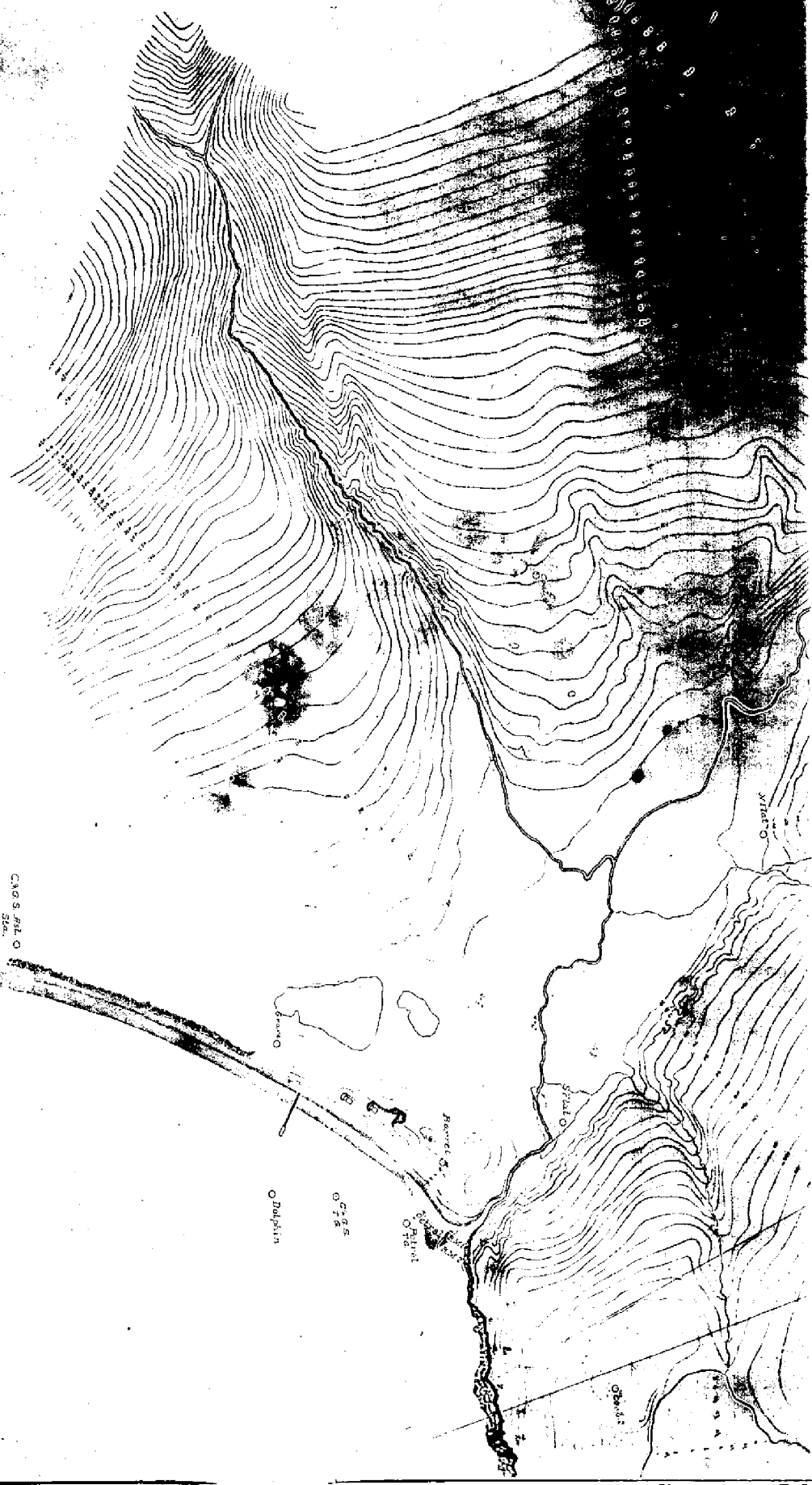
0755

Barrel

Shut

0755

0755





N. 2.

From ridge north of Kiska Hbr. - looking
towards South Pass - North Head on left -
Beginning at left; - C.G.S. Str. McArthur -
U.S.S. Petrel - Navy Collier "Saturn" -
C.G.S. Str. Patterson.



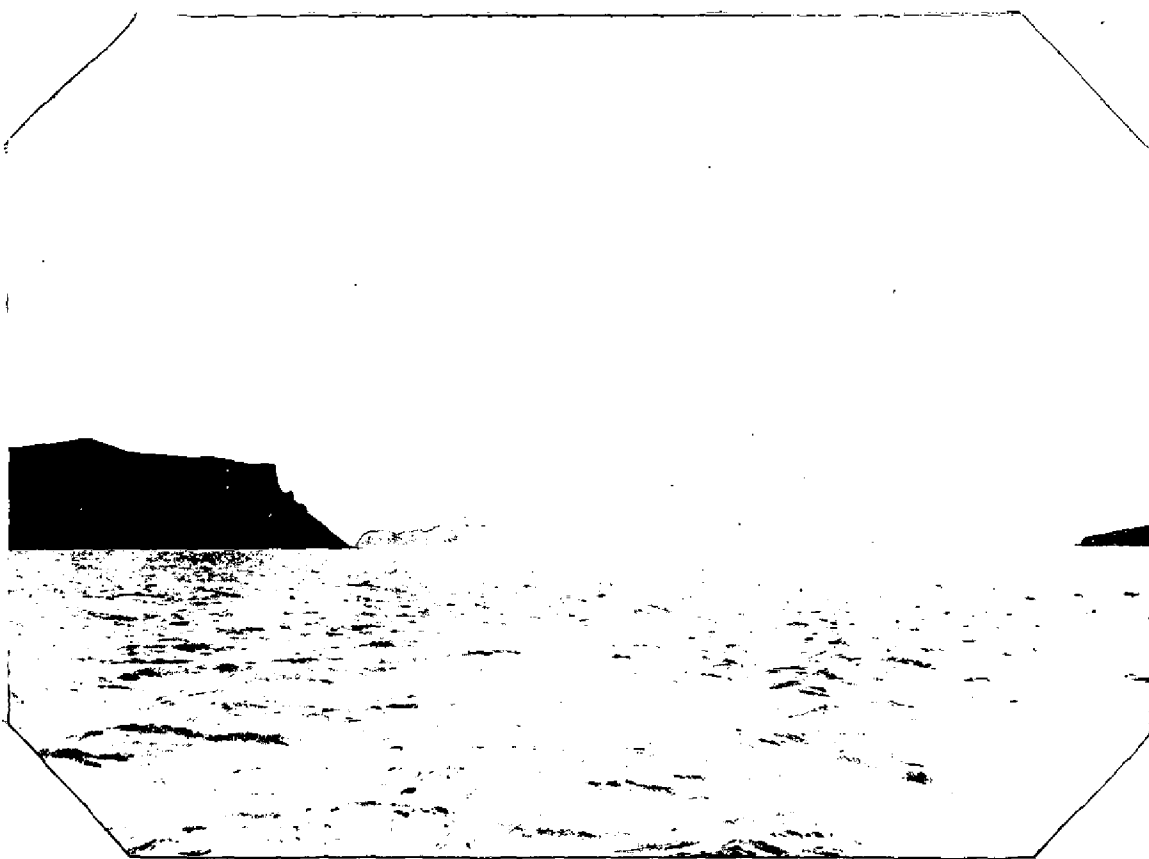
N. 3.

*From summit west of Kiska Hbr. -
looking south and showing western
shore of Kiska Island.*



IV. 4.

*From anchorage Kiska Hbr. - showing North Head
on left and Little Kiska Island on the right side
of the view. - A short distance to the left of
perpendicular bluff, Triang. Sig. N. Head is visible.*



N. 5.

*Kiska Harbor - North Head and Eastern Entrance
on left - Northern side of Little Kiska Isld. in center -
South Pass on right.*



N. 8.

*Graves on site of abandoned Aleut village
on northern shore of Kiska Harbor.*



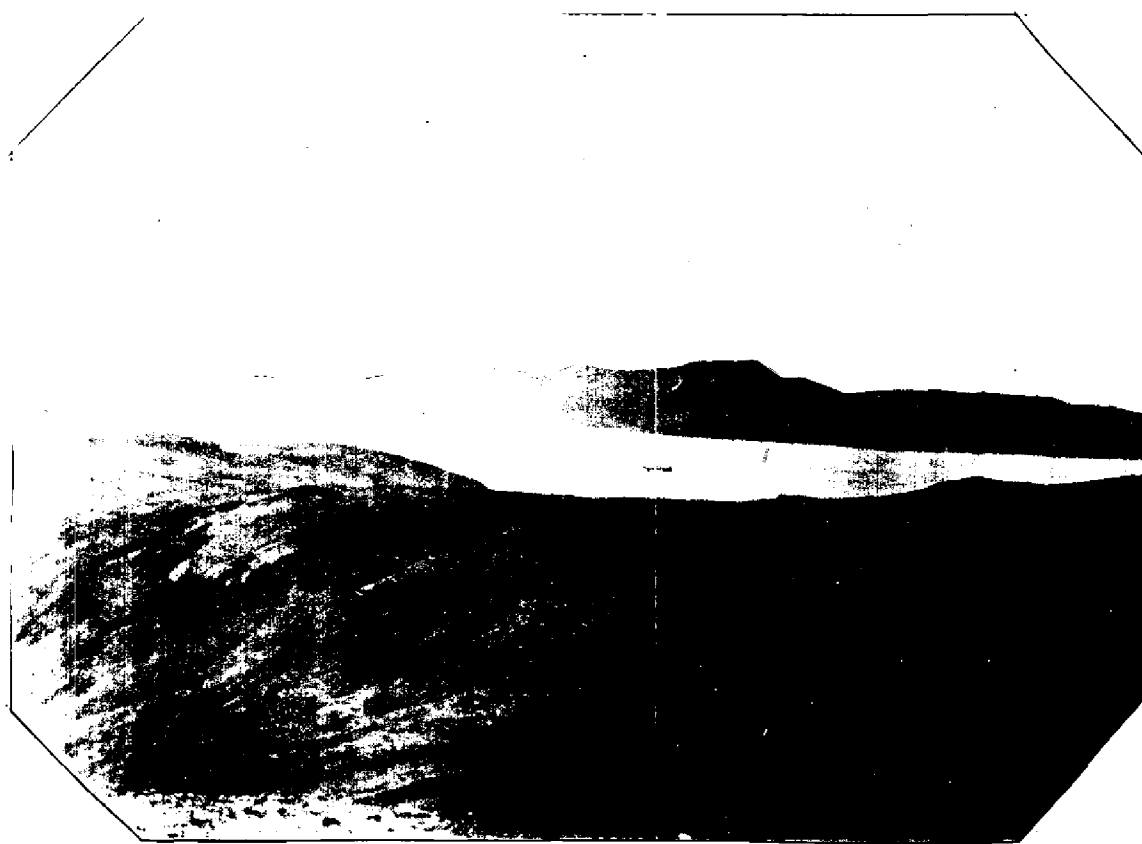
N. 9.

View from high point east of northern end
of Kiska Hbr. - looking towards Chugach Isld. -
shows northern shore of Salmon Lagoon -
(joins N. 11.)



N. 11.

View from high point east of northern end
of Kiska Hbr. - looking towards Little Kiska Isld.
Shows Little Kiska Isld. and south shore of
Salmon Lagoon - also Tanadag Isld. on
horizon in left side of view. -
(joins N. 9. and 12.).



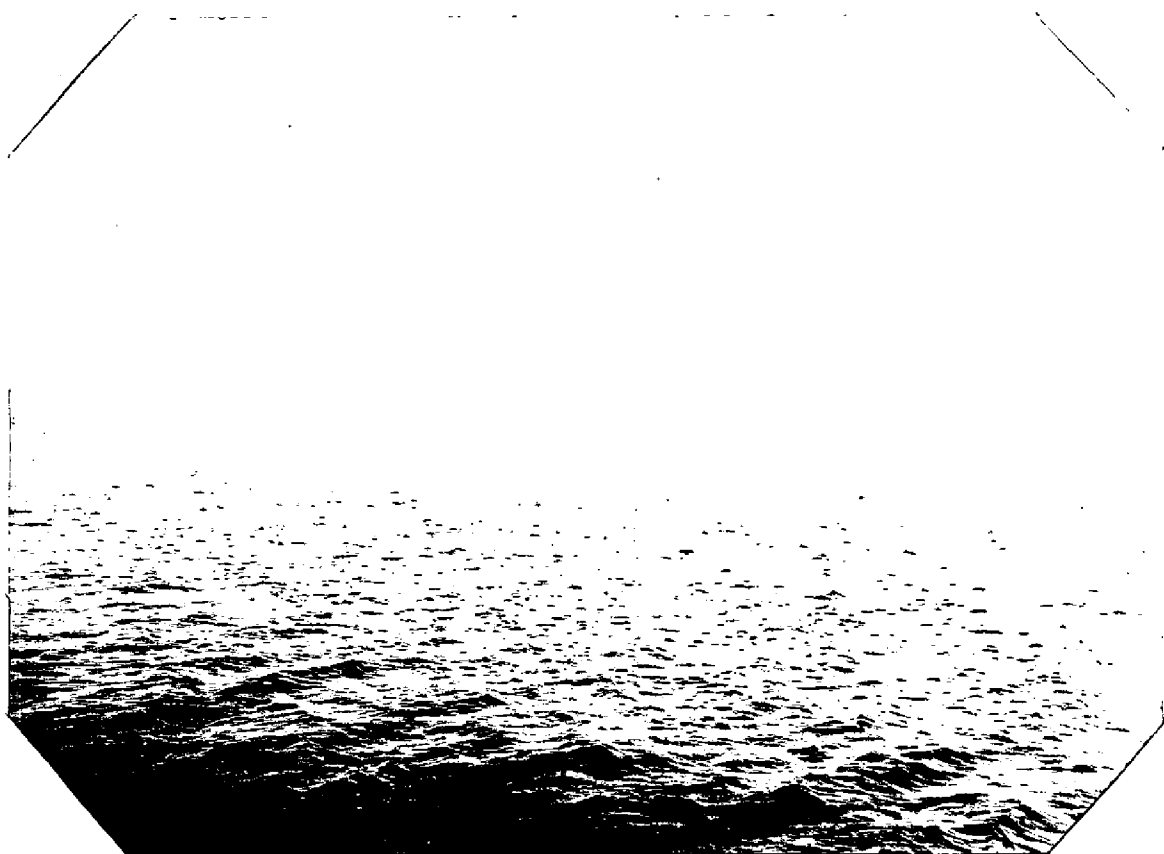
N. 12.

View from high point east of northern end
of Kiska Hbr. - looking towards harbor -
(joins N. 11.).



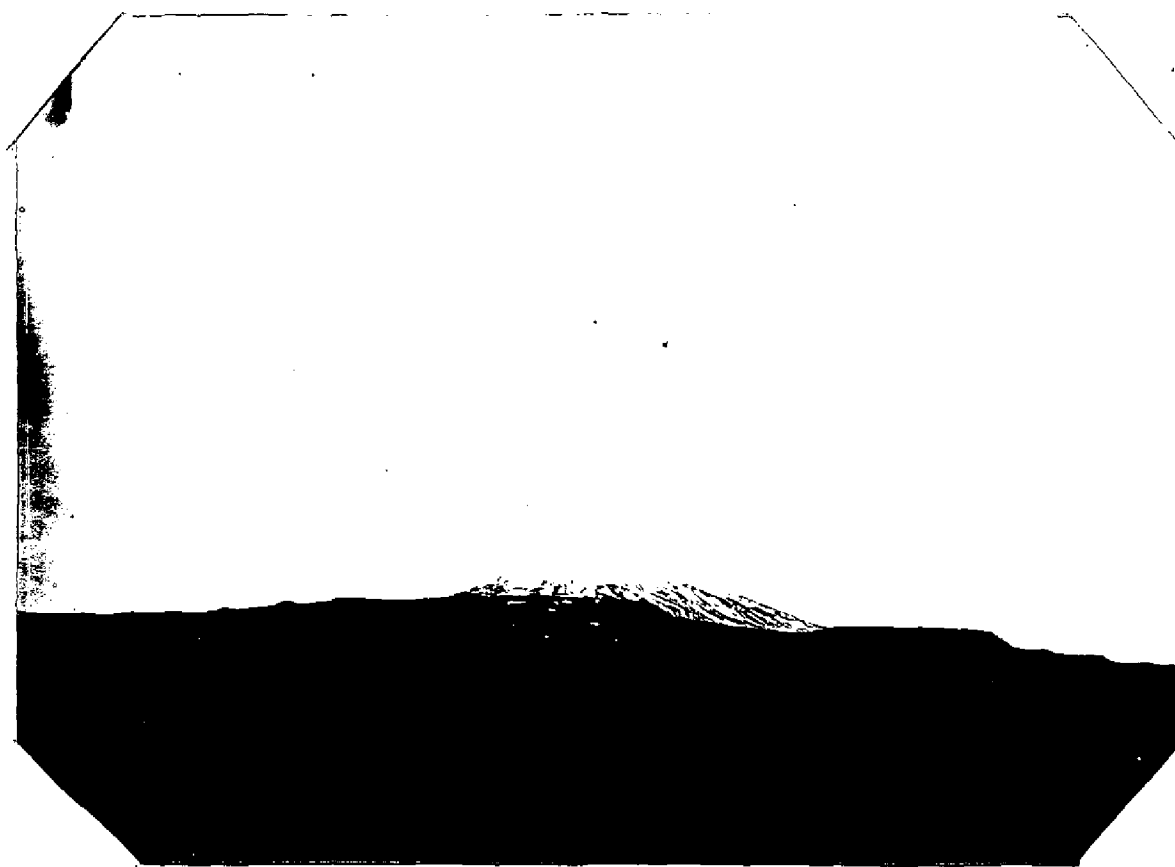
N. 15.

*View of South Pass, Kiska Hbr. - from eastern
entrance to the harbor - looking south.*



N. 15.

*View of South Pass, Kiska Hbr. - from eastern
entrance to the harbor - looking south.*



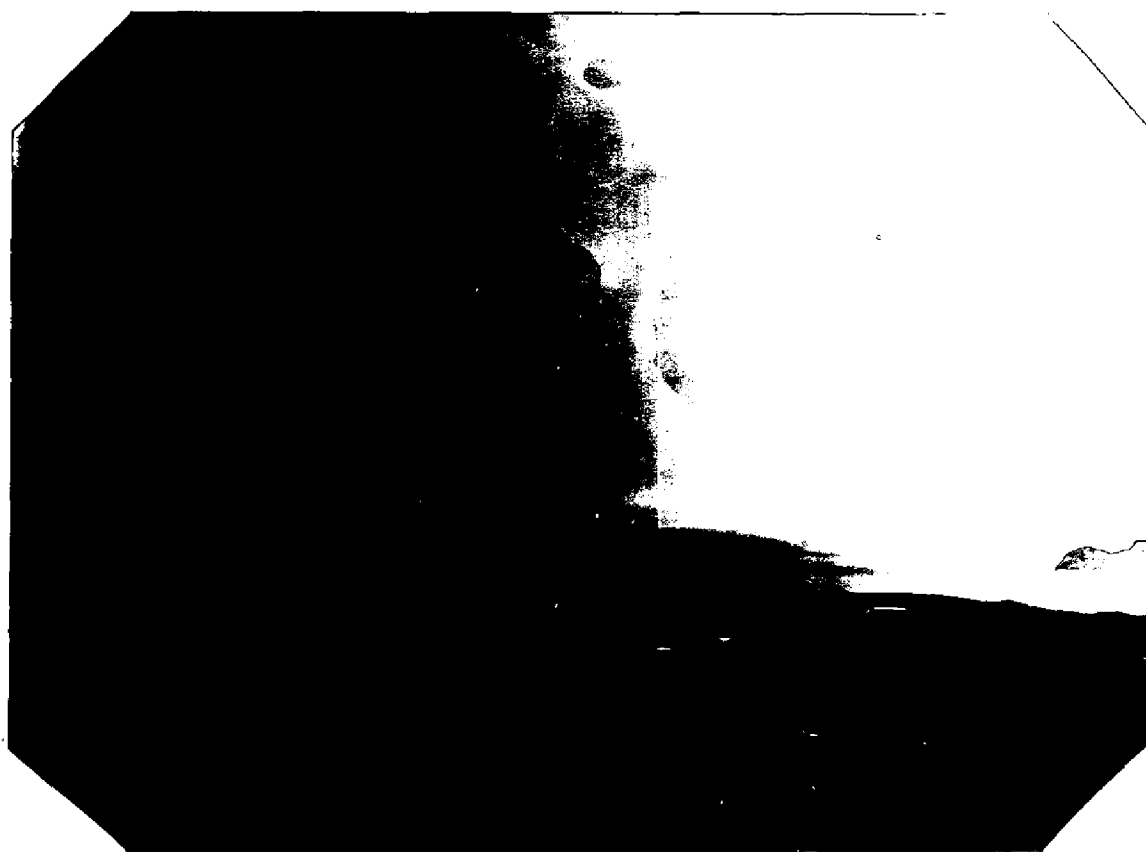
N. 16.

*View of Volcanic Peak on northern end
of Kiska Island. - view taken from top
of ridge (elevation about 700 ft. above harbor)
just west of the northern end of harbor.*



N. 18

View of northwestern end of Kiska Hbr. -
 The bluff on right is the one from which
 view N^o 16 was taken. - The ships at anchor
 are from left to right U.S.S. Petrel - C^oG.S. Str.
 Patterson - C^oG.S. Str. McArthur.



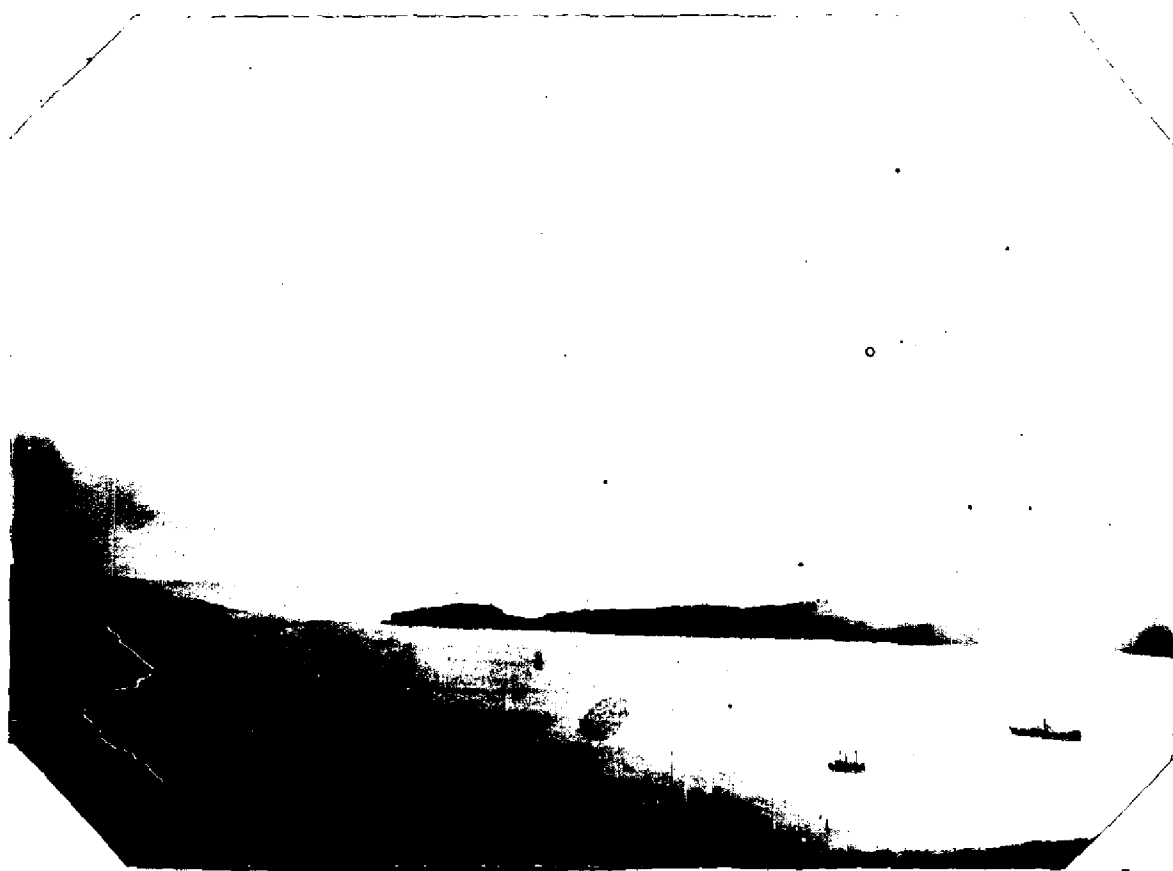
N. 22.

View from ridge northeast of Kiska Hbr. -
Chugach Isld. on left. - eastern end of
Little Kiska Isld. and Tanadag Isld. (on horizon)
on right.



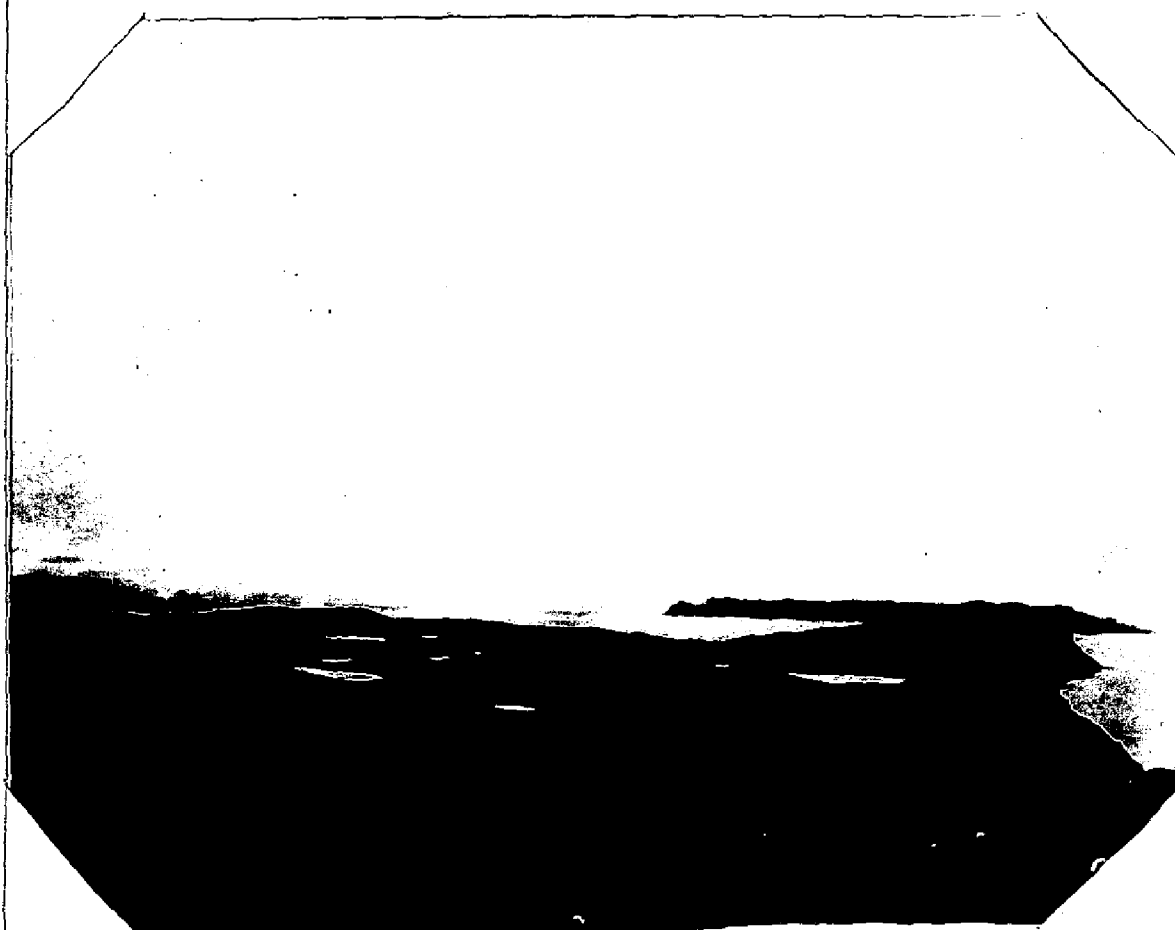
N. 23.

*View of Naval Whf. built during 1904 at
northern end of Kiska Hbr. - C.F.G.S. Self. Reg. T.G. -
Eastern shore of northern end of harbor. -
"North Head" on right.*



No. 25.

View of Kiska Hbr. - from top of ridge north
of harbor - looking towards South Pass -
showing western end of Little Kiska Isld -
and South Head.



N. 26.

*General view showing Chugot Isld. - Tanadak Isld.
(showing just over the extreme eastern end of Little
Kiska I.) - Little Kiska Isld. - North Head - and
eastern side of Kiska Harbor.*



N.36

Naval Coaling Station site - and
ridge north of northern end of Kiska Hbr. -
Naval pile-driver - Naval launch - Naval Whf. and
portable houses 1904.



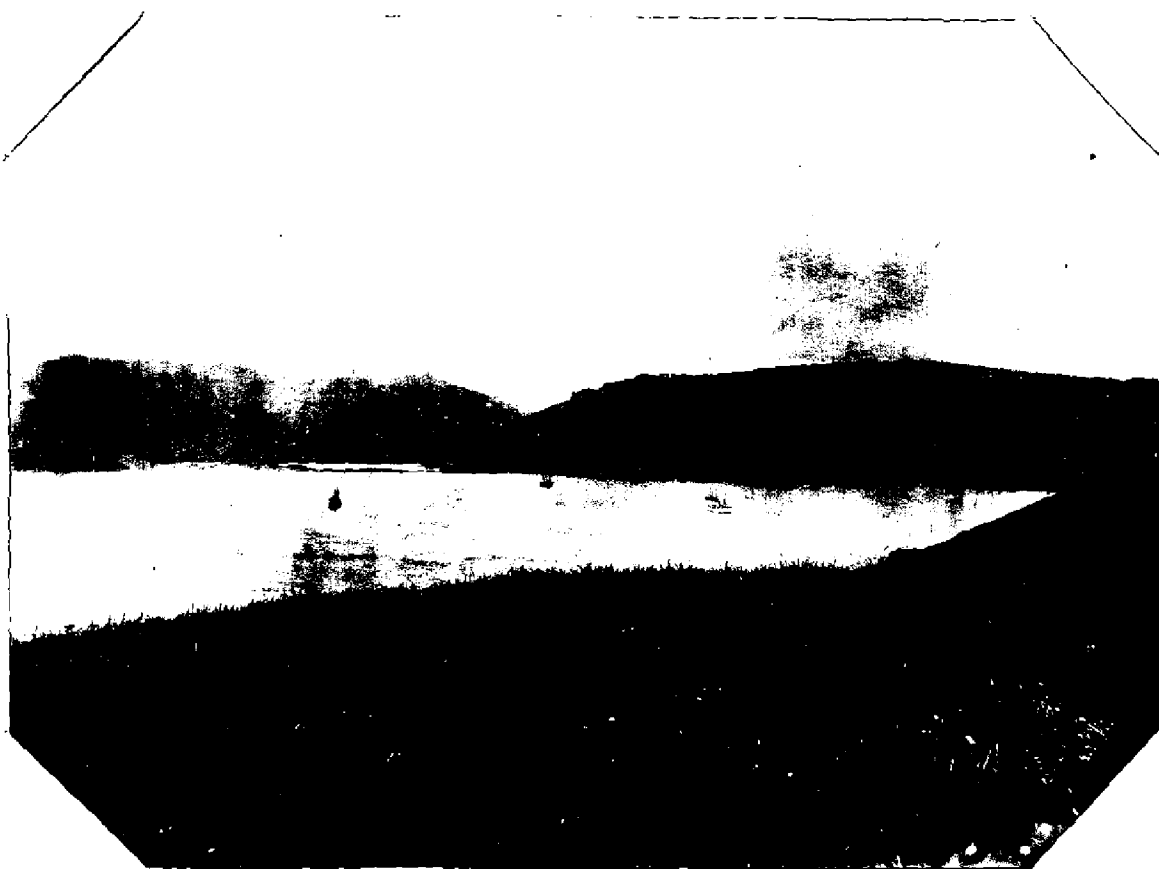
N. 37.

*Birdseye view of Northeastern end of Kiska Hbr. -
showing Chugai Island on horizon - North Head -
Eastern entrance to harbor - and
Little Kiska Isld. on right.*



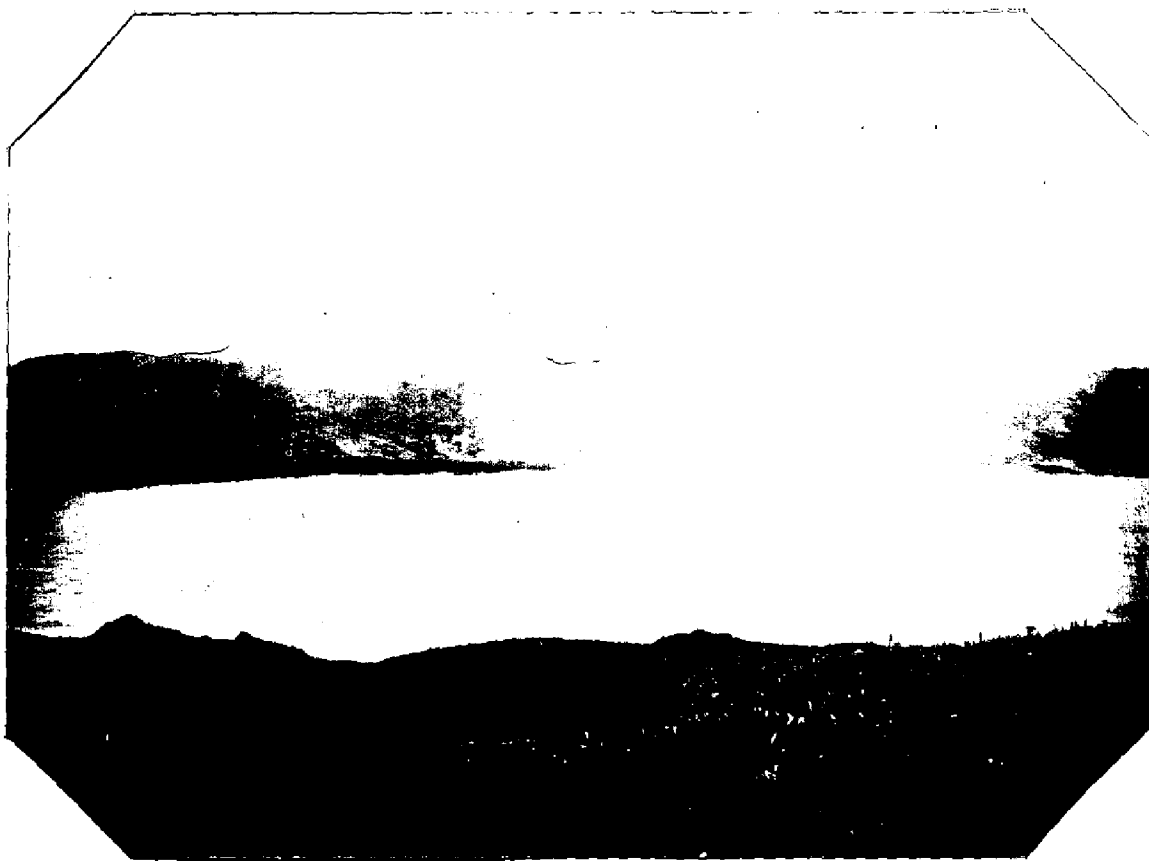
Nº 38.

*View from summit west of Kiska Hbr. -
looking north and showing western shore
of Kiska Island.*



N. 39.

Round of views from Iriang Sta., North Head.-
North end of Kiska Hbr. — (joins N. 40.).



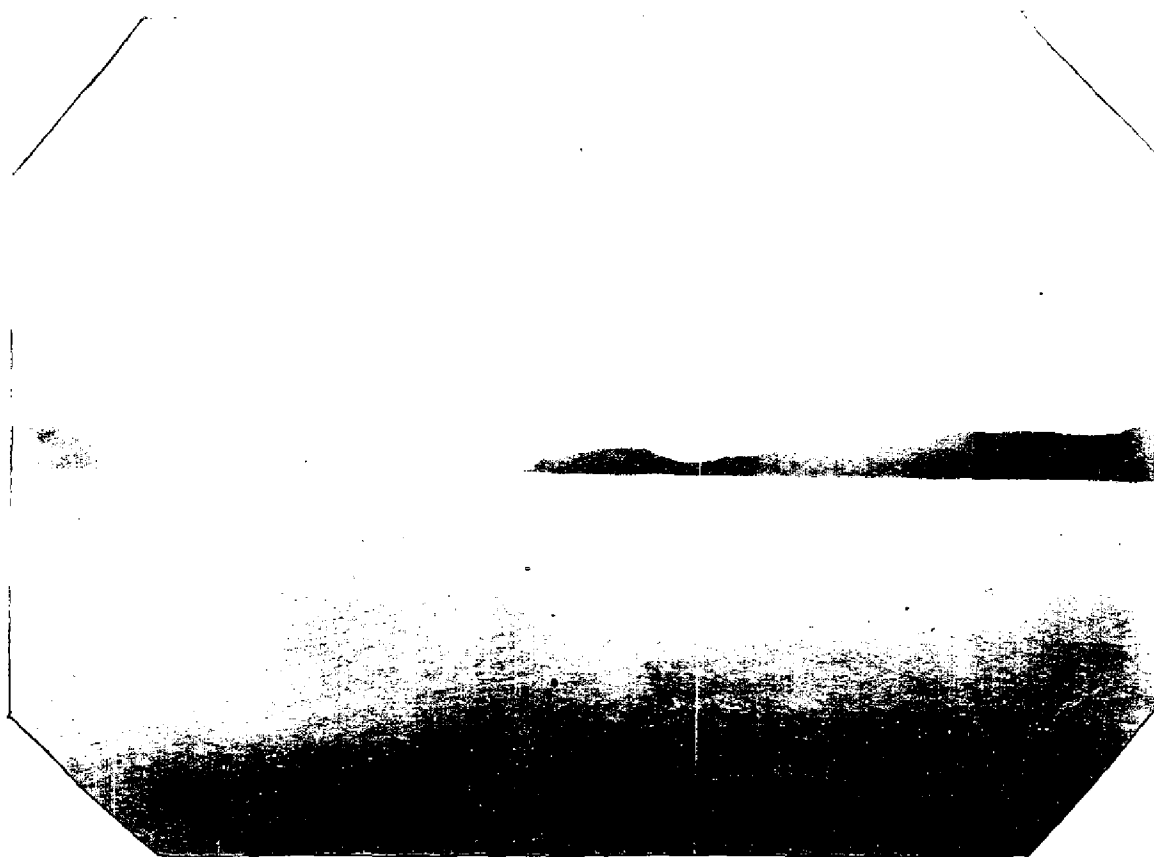
N.40.

*Round of views from Triang. Sta. N. Head --
Shows west shore Kiska Hbr. - (joins N.41.).*



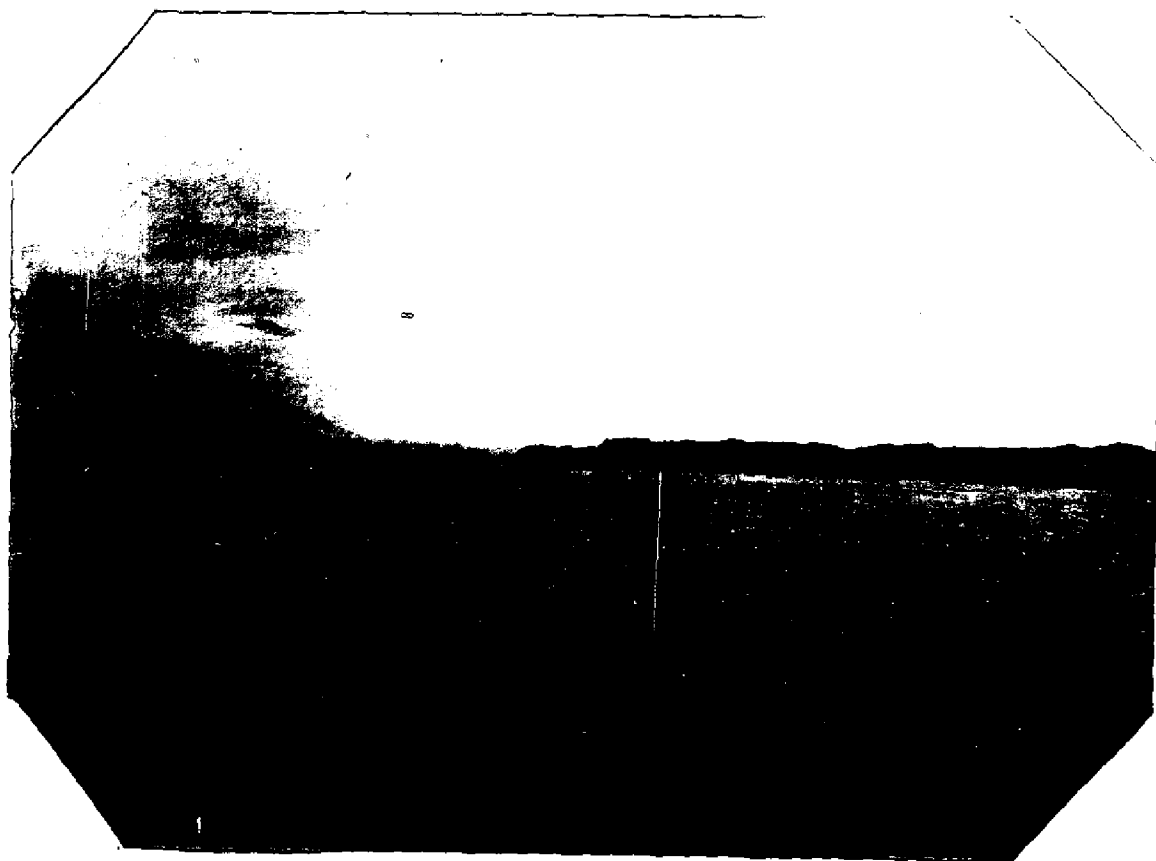
N. 41.

Round of views from Triang. Sta. N. Head -
S.W. shore of Kiska Hbr. - (joins 42.).



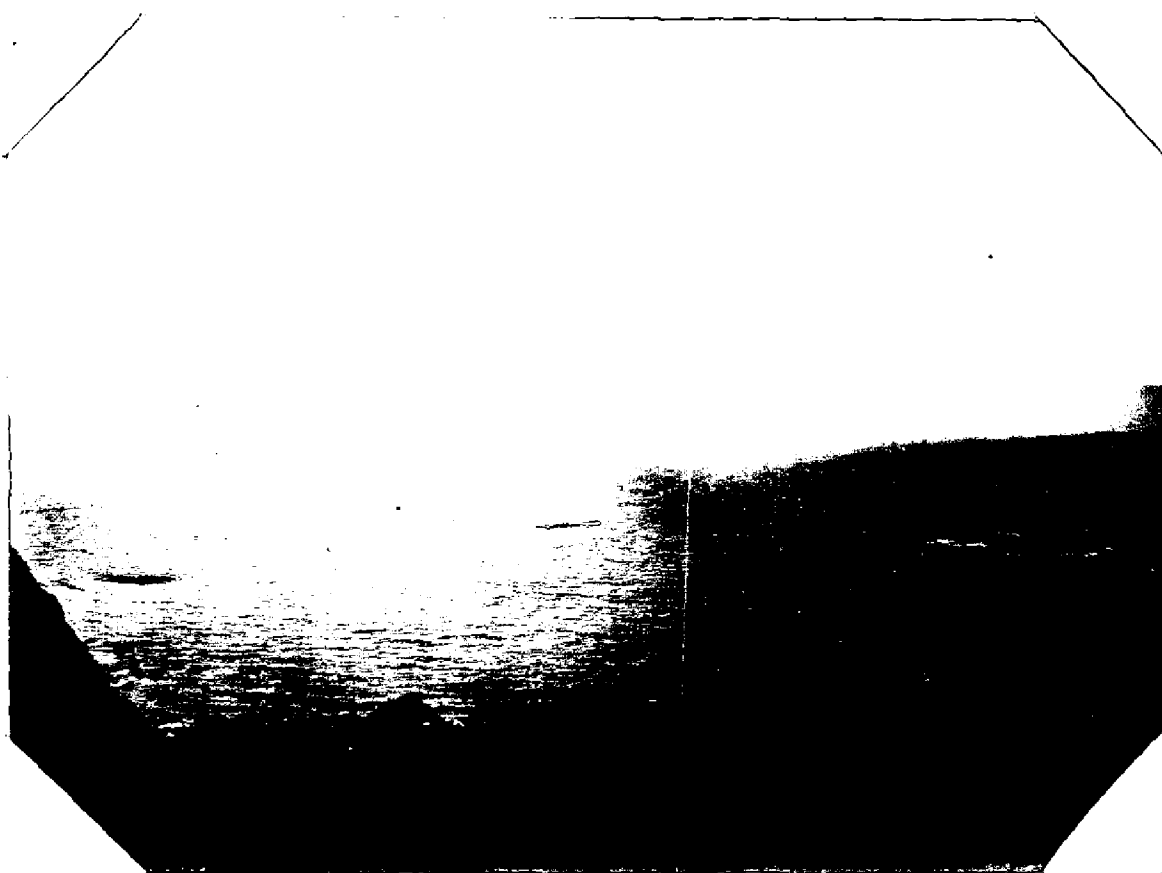
N.42

*Round of views from Triang. Sta. N. Head -
South shore of Kiska Hbr. - (joins N.43).*



N. 43.

Round of views from Triang. Sta. N. Head -
E. end of Little Kiska Isld. (joins 44 and 45.).



N. 44.

Round of views from Triang. Sta. North Head.-
Looking northeastward - (joins N. 50 and 51.).



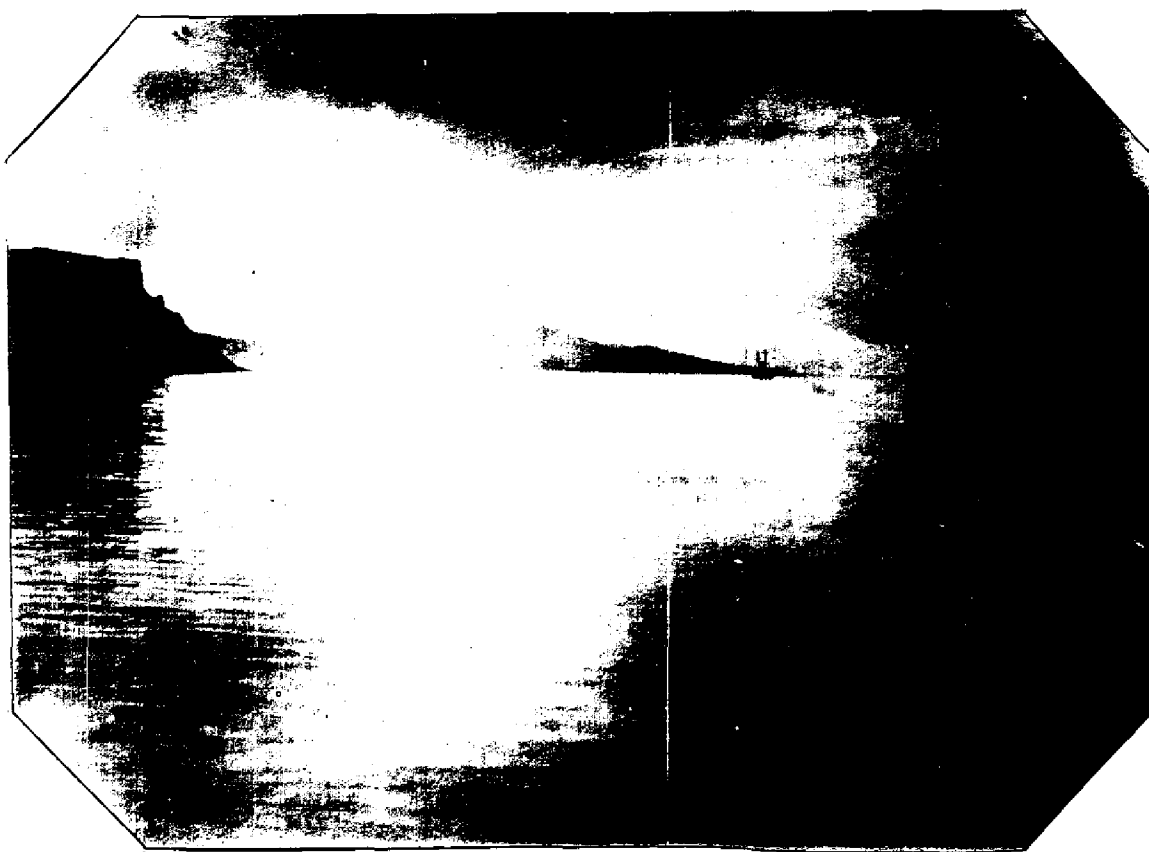
N. 46

View from a point a short distance north
of Triang. Sta. N. Head - looking north and
shows eastern shore of Kiska Isld. - joins N. 47.



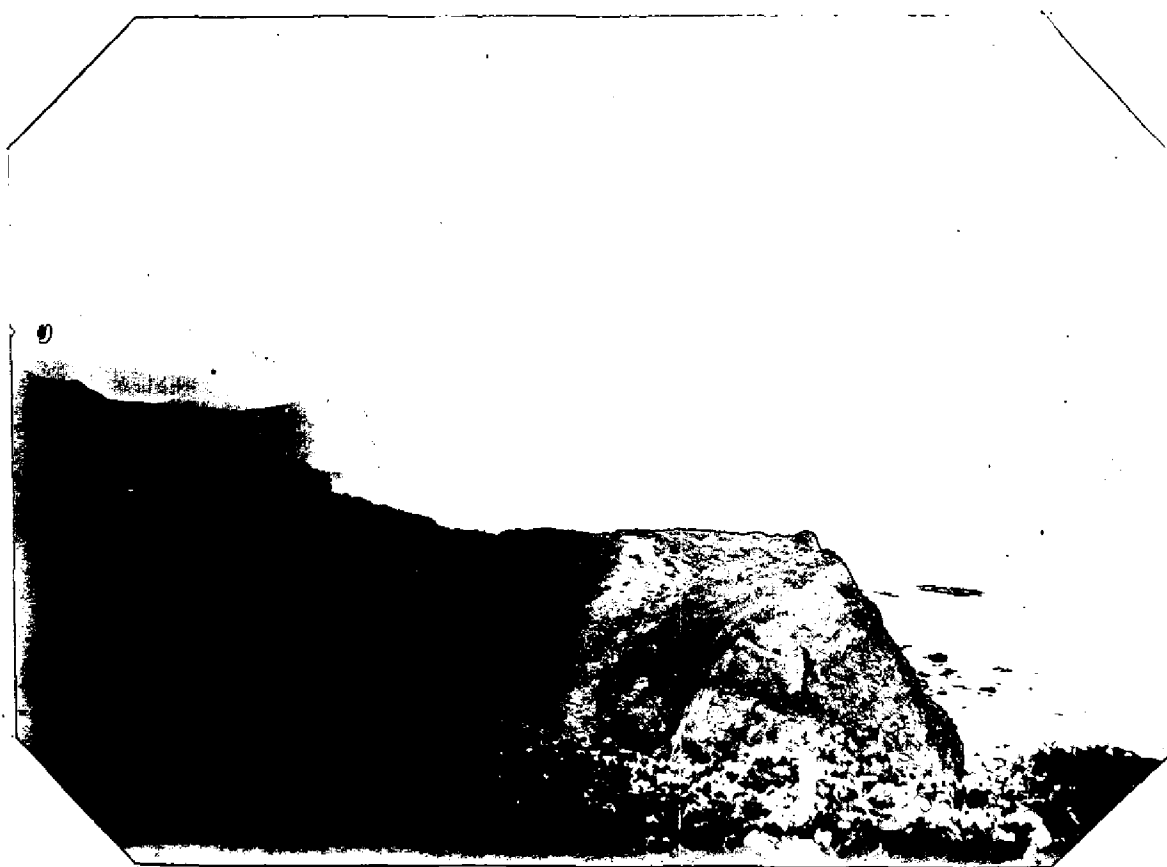
N. 47.

View from a point a short distance north of
Triang. Sta. N. Head. - shows north end of Kiska Hbr. -
(N 46 and 47 show the view between N. 39 and 51.)



No. 48.

*View from anchorage Kiska Hbr: -
looking south - North Head on left -
U.S.S. Petrel on right.*



Nº. 50

*Round of views from Triang. Sta. N. Head -
looking north and showing part of
eastern shore of Kiska Island.*



N. 52.

View showing the two groups of rocks (Haycock and Northeast Rocks) lying near shore of northeastern end of Kiska Island.



N. 53.

*View from Str. McArthur - from eastern
entrance to Kiska Hbr. - showing
Little Kiska Head.*

Homar P. Ritter

Asst. C. G. Survey.