

6712

U. S. COAST & GEODETIC SURVEY
LIP AND ARCHIVES

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Form 504 Ed. June, 1928	
DEPARTMENT OF COMMERCE U. S. COAST AND GEODETIC SURVEY L. O. COLBERT, Director	
State: ALASKA	
DESCRIPTIVE REPORT	
Topographic } Hydrographic }	Sheet No. Field F-39 Register No. - T-6712
LOCALITY	
SOUTHWEST BERING SEA and	
PACIFIC COAST OF UMNAK ISLAND	
ALEUTIAN ISLANDS	
1939	
CHIEF OF PARTY	
RAY L. SCHOPPE	

U. S. GOVERNMENT PRINTING OFFICE: 1933

DECLASSIFICATION BY NOAA

PURSUANT TO DOC SYSTEMATIC REVIEW

GUIDELINES AS DESCRIBED IN SECTION

3.3 (a), EXECUTIVE ORDER 12356

Applied to ch 8802 J.M.A. Nov 1940

" " comp. 8861 J.M.A. Feb. 11, 1942

" " " 9025 J.M.A. March 1942

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.

Project HT-218

Field No. F-39

REGISTER NO.

T6712

State ~~ALASKA~~ - ALEUTIAN ISLANDS

General locality UMNIAK ISLAND

Locality NEAR SW END OF UMNIAK ISLAND (Cape Starr area)

Scale 1:20,000 Date of survey July, August, 1939

Vessel U.S.C.&G.S. Str. SURVEYOR

Chief of party Ray L. Schoppe

Surveyed by A.C. Thorson

Inked by A.C. Thorson

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

Contour, Approximate contour, Form line interval 100 feet

Instructions dated February 3, 1938

Remarks:

DESCRIPTIVE REPORT

to accompany

TOPOGRAPHIC SHEET - FIELD NO. F-39 T-6712 (1939)

SOUTHWEST COAST - UMNAK ISLAND, ALASKA

PROJECT - HT-218

FIELD SEASON - 1939

INSTRUCTIONS:

Field work was executed in accordance with Director's Instructions dated February 3, 1938, covering combined operations of the Str. SURVEYOR.

EXTENT OF SURVEY:

This survey includes the Bering Sea coast of Umnak Island from the Point in Latitude $52^{\circ} - 56.2'$ and Longitude $168^{\circ} - 57.4'$ southwestward to Latitude $52^{\circ} - 52'$ and Longitude $169^{\circ} - 02'$. It includes the coastline of Umnak Island bordering on the Pacific Ocean from Latitude $52^{\circ} - 54.9'$ and Longitude $168^{\circ} - 50.2'$, southwestward to Latitude $52^{\circ} - 51.7'$ and Longitude $169^{\circ} - 01.8'$. It also includes the interior area of the Island bounded by the above points.

GENERAL DESCRIPTION:

BERING SEA SIDE: There is a bold headland in the northern part of this area beginning at northern limit of sheet (triangulation station TANG) and south for about one and one half miles. Back of the high water line steep rocky bluffs rise 150 to 350 feet. They are backed by rolling grass covered hills. A broad rocky ledge extends offshore from the point at triangulation station TANG. The stretch of shoreline from triangulation TANG to signal HOW is flanked by rough irregular rocky ledges and reefs, numerous rocks and extensive kelp beds for some distance offshore.

The reef shown 400 meters offshore from signal ~~SOL~~ ^{SOL} bares at M.L.L.W. It is composed of sand (probable deposited by ocean currents) surrounded by sunken rocks. One small portion bares 5 feet at highwater. The reef is surrounded by a thick bed of kelp that had increased beyond the limits shown when the hydrographic party operated there later in the season.

The 22 foot islet on which triangulation station PANCAKE is located is a flat topped bare rock with a ledge partially awash at H.W. extending about 350 meters to the westward.

The 15 foot islet just south of signal RAW is bare rocky formation surrounded by ledges and rocks awash.

The 44 foot islet, the highest point of which is triangulation station SAP, is a jagged rocky formation sloping from the highest point at the station to the south to a rocky ledge. A thick kelp bed lies to the south of the islet.

A small rock about 5 meters across (signal OAK) bares 2 feet at H.W. An irregular chain of rocks extend to the westward from this about 400 meters and three of them bare as indicated at M.L.L.W.

South from the headland described above, from signal HOW south to signal RED, there lies a wide sand beach. The beach is flat and the sand has a fine white texture. Back of the high water line along the entire extent of this beach are low grass covered sandy bluffs formed by the wind piling up the beach sand. Inland from the beach a broad grassy valley extends across the island easterly and bending northeasterly to the chain of lagoons south of Nikolski Village.

The remainder of the Bering Sea coast covered by this sheet, between signals RED and JAR, is rocky and very rugged. Back of the high water line steep rocky cliffs rise 60 to 200 feet thruout its extent. There are numerous jagged rocky projections and rock pinnacles. The area outside the high water line is covered with rocks, small ledges and flanked with patches of kelp.

Triangulation station Lake is the highest point of a grass topped rock pinnacle rising to an elevation of 44 feet from the middle of a flat peninsula extending out from a small, shallow rocky inlet.

The hill on which triangulation station ELBOW is located is grass covered and very prominent from seaward in all directions. It is the highest point of the west end of Umnak Island.

PACIFIC OCEAN SIDE: At the western end of the survey, extending from station LER southwestward onto Field Sheet G-39, there is a wide sand beach. Offshore from this beach there is a wide, uniformly flat topped rocky ledge that is completely covered at high water. From signal LER the coast dips to the SE terminating in a rocky point on which triangulation station RAM is located. In the bight west of this point there are numerous offshore rocks and reefs.

From triangulation station RAM, northeastward to signal BOY, the shoreline has a narrow fringe of shingle. A continuous rough rocky ledge, partially bare at high water, borders this area. Inshore a rocky bluff, partly grass covered is continuous and is backed by grassy rolling terrain.

From signal BOY, NE for $3\frac{1}{2}$ miles the coastline is very bold. The bluffs back of the high water line are steep and rocky from 150 to 350 feet high and appear prominently from seaward. This area is also flanked outside the high water line by a continuous irregular rock ledge that is bare at M.L.L.W. Kelp beds border the rock ledges. The ledges are flat on top except at the rocky projecting points near signals ZOO and LAT, and triangulation stations UM and NOD, where the rock appears to be of a harder formation and the tops of the ledges are jagged and partially bare at high water.

Between triangulation stations NOD and NAK there is a shallow bight having a sandy beach backed by low grassy bluffs about 100 meters inland. Out from the high water line the same flat irregular rocky ledges prevail. Inland from this bight is a low grassy valley extending north to

Nikolski Village. A chain of three lagoons separated by narrow strips of land lie in this valley and are continuous across the island. ✓
3rd lagoon shown on T-6647 (1938).

At the eastern limit of this survey, vicinity of triangulation station NOD, is a very bold headland. The steep rocky bluffs at this point rise up to 500 feet. The headland is prominent from the seaward. ✓
The beach at this point is boulder strewn and flanked by a flat rocky ledge. ✓

The interior area included in this survey is all grass covered. ✓

CONTROL:

This sheet was controlled by second and third order triangulation executed during the 1937 and 1938 field seasons. Supplemental third order triangulation during the 1939 season was executed to establish stations RAM and UMPIN. The latter is a pinnacle rock 64 feet high prominent from inshore. ✓

SURVEY METHODS:

Signal building was first executed on the Bering Sea coast. Plane table setups were then made at triangulation stations PANCAKE, SAP, ELME and LAKE and the hydrographic signals were all cut in. Three cuts were obtained on most of the signals from these points. A setup was made on the rock (signal OAK) and additional cuts taken from there. Cuts for elevations were taken at the same time. ✓

All planetable setups on the Bering Sea coast were at previously located hydrographic signals or at a point where a 3-point fix could be obtained. ✓

Detailing in the vicinity of the rocky islets was completed when they were occupied to cut in hydrographic signals. Detailing along the shore was started at triangulation station TANG, and proceeded south to triangulation station LAKE. All rocks, rocky ledges, shoreline, bluff line and other features were located by stadia. ✓

At triangulation station LAKE a cut was taken to signal GOR on the Pacific Ocean coast. This was occupied and located by resecting on triangulation stations ELBOW and RAM. ✓

A traverse was run to triangulation station RAM and closed without error. All the detail including offlying reefs were delineated by stadia. ✓

Signal building was next completed on the sheet. ✓

A flag was placed at signal RAW and located by a 3-point fix using triangulation stations RAM, ELBOW and UM. The coastline between triangulation stations RAM and signal RAW was then traversed with no appreciable error and the intervening detail located by stadia. ✓

The traverse between signal RAW and triangulation station UM closed 7 meters. The only adjustment made was in the location of the intervening signals. The detail was located either by stadia or by two or more cuts with the alidade. 3 1/2 meters per mile. O.K. ✓

The traverse between triangulation stations UM and NOD closed without appreciable error. The outline of the ledges in this area were located by stadia and by cuts from planetable setups. The sunken rock off triangulation station NOD was located by three intersections from planetable setups. The outline of rocky ledge at this point was located by stadia.

The traverse between triangulation stations NOD and NAK closed without appreciable error. The outlying ledges were partially awash when located so their limits may be slightly in error. Heavy seas were prevalent when this area was surveyed making approach to the ledges with a boat difficult.

The bluffs shown on this sheet were located by numerous stadia readings at both top and bottom.

The two lagoons located north of triangulation station NOD were located by stadia. The northerly of the two is separated by a narrow neck of land from a larger lagoon that lies just south of Nikolski Village.

ELEVATIONS:

All elevations were obtained by planetable intersections using the alidade for vertical angles and the hypsograph for computing the elevations.

FORM LINES:

The form lines were sketched from both sides of the island and all configurations were viewed from several different angles consequently should be a fairly accurate representation of the area.

JUNCTION WITH ADJACENT SURVEYS:

This survey joins topographic sheet T-6647 at the northern end of its Bering Sea side at triangulation station TANG - junction was exact.

A junction with topographic sheet T-6648⁽¹⁹³⁸⁾ was made at triangulation station NAK at the NE end of the Pacific Ocean side of the survey. The shoreline and bluff lines checked correctly but the contours in the interior were slightly changed to conform with elevations obtained and the configuration as viewed from planetable setups at triangulation station NOD and near signals JOY and YAM.

The junction with Field Sheet ^{T-6711 (1939)} G-39 at the west end of the survey, on both sides of the island was exact as both surveys used the same control points, viz., triangulation station LAKE and signal GOR and started from these points.

COMPARISON WITH EXISTING CHARTS:

Chart 8802 covering this portion of Umnak Island is on such a small scale that a comparison is not possible.

NAMES:

The names BERING SEA, UMNAK ISLAND and PACIFIC OCEAN are from Chart 8802. No new names were designated by the field party on this survey.

LIST OF PLANETABLE POSITIONS:

CAN - whitewash on rock outcrop - not recoverable
IMP - whitewash on driftwood - not recoverable
AND - whitewash on offlying rock - not recoverable
SOL - whitewash on driftwood - not recoverable
LUB - whitewash on driftwood - not recoverable
DRY - whitewash on outlying rock - not recoverable
RAW - middle of small rock - recoverable
WET - whitewash on rock outcrop on ledge - not recoverable
HOW - whitewash or rock outcrop - not recoverable
SON - whitewash on driftwood - not recoverable
COS - banner on log - not recoverable
MIX - whitewash on driftwood - not recoverable
ALL - whitewash on driftwood - not recoverable
AIR - whitewash on driftwood - not recoverable
RED - whitewash on face of cliff - not recoverable
TRY - tripod signal on point - not recoverable
BUM - whitewash on driftwood - not recoverable
ADD - whitewash on driftwood - not recoverable
ANY - whitewash on outlying rock - not recoverable
✓ FAR - whitewash on rocky point - not recoverable
✓ SIS - whitewash on rocky point - not recoverable
DON - whitewash on offlying rock - not recoverable
✓ BEE - whitewash on N face offlying rock - recoverable
BAS - whitewash on face of cliff - not recoverable
KAY - whitewash on rock pinnacle - not recoverable
ALE - whitewash on offlying rock - not recoverable
KEN - whitewash on rock pinnacle - not recoverable
RUG - whitewash on rocky point - not recoverable
ET - whitewash on rocky point - not recoverable
JAR - whitewash on offlying rock - not recoverable
GOR - tripod on sand dune - not recoverable
HIT - S. gable of sheep shed - recoverable
LER - tripod on top of bluff - not recoverable
DER - tripod on top of bluff - not recoverable
TAG - TUG - whitewash on driftwood - not recoverable
BUD - tripod signal top bluff - not recoverable
✓ BIG - whitewash on prominent point - recoverable
GIB - whitewash on rock outcrop on ledge - not recoverable
GAB - tripod signal on bluff - not recoverable
ERG - whitewash on rock outcrop on ledge - not recoverable
✓ DEN - whitewash on boulder - not recoverable
RUB - whitewash on rock point - not recoverable
EAT - whitewash on projecting rock - not recoverable
RAW - tripod top of bluff - not recoverable
SEL - whitewash on face of cliff - not recoverable
TEL - whitewash on rock on ledge - not recoverable
BOY - whitewash on rocky cliff - not recoverable
ZOO - whitewash on rock outcrop on ledge - not recoverable
MAS - whitewash on face of bluff - not recoverable
ZEKE - whitewash on face of bluff - not recoverable
FULL - whitewash on face of bluff - not recoverable
TEX - whitewash on S. and S.E. face of pinnacle rock highest
point of which is triangulation station UMPIN - not recoverable
GUD - highest point of 10' outlying rock - recoverable
OAK - high point of small rock islet - recoverable

List of planetable positions (cont):

LAT - whitewash on rocky point - not recoverable
DAR - whitewash on face of cliff - not recoverable
WHITE- whitewash on face of cliff - not recoverable
PEW - whitewash on face of cliff - not recoverable
✓ REG - whitewash boulder on beach - not recoverable
✓ AL - whitewash on driftwood - not recoverable
✓ DON - whitewash on rocky point of cliff - not recoverable
✓ JEL - whitewash on driftwood pile - not recoverable
✓ JOY - whitewash on driftwood pile - not recoverable
✓ TOR - tripod on beach - not recoverable
✓ YAM - whitewash on driftwood - not recoverable
✓ NAP - whitewash on rocky point - not recoverable
✓ POP - whitewash on face of rock cliff - not recoverable
✓ ON - whitewash on face of rock cliff - not recoverable

STATISTICS:

Statute miles of, shoreline..... 21.6
Square statute miles of topography..... 26.0
Statute miles - Lakes and rivers..... 3.0

Respectfully submitted,

A.C. Thorsen

A.C. Thorsen
Jr. H.&G. Engr.

Examined and approved:

Ray L. Schoppe

Ray L. Schoppe, H.&G.E.
Chief of Party
Commanding Ship SURVEYOR

Remarks

Decisions

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GEOGRAPHIC NAMES

Survey No.

T6712

Name on Survey

	A, On Chart No.	B, On previous survey No.	C, On U. S. quadrangle Maps	D, From local information	E, On local Maps	F, P. O. Guide or Map	G, Rand McNally Atlas	H, U. S. Light List	K	
<u>Umnak Island</u>										1
<u>Bering Sea</u>										2
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Names underlined in red approved

by L. Heck on 5/21/40

MEMORANDUM

IMMEDIATE ATTENTION

SURVEY
DESCRIPTIVE REPORT
PHOTOSTAT OF

No. H
No. T

T6712

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
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RETURN TO

82	T. B. Reed
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✓ JBR

4-23-40

DIVISION OF CHARTS

SURVEYS SECTION

REVIEW OF TOPOGRAPHIC SURVEY NO. 6712 (1939) FIELD NO. F-39

Aleutian Islands; Umnak Island; Southwest End
Surveyed in July - August 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 - A. C. Thorson
Reviewed by - J. A. McCormick, May 21, 1941
Inspected by - H. R. Edmonston

1. Junctions with Contemporary Surveys

Satisfactory junctions were effected with T-6647 (1938) on the north, T-6648b (1938) on the east and T-6711 (1939) on the west.

2. Comparison with Prior Surveys

This Bureau has made no previous surveys in this area.

3. Comparison with Chart 8802 (New Print of Nov. 1, 1940)

The chart is on such a small scale that detail must be considerably generalized. Charted features appear to be fairly representative of the area as found on the present survey.

4. Condition of Survey

Satisfactory.

5. Compliance with Instructions for the Project

Satisfactory.

6. Additional Field Work Recommended

None.

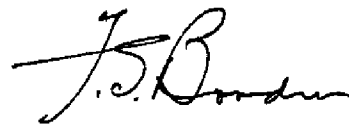
7. Superseded Surveys

None.

Examined and approved:



Chief, Surveys Section



Chief, Division of Charts



Chief, Section of Hydrography



Chief, Division of Coastal
Surveys