

4948

U. S. COAST & GEODETIC SURVEY
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Acc. No.

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

DESCRIPTIVE REPORT

Topographic }
~~Hydrographic~~ } Sheet No. Field No. QA-38

State ~~Alaska~~ Aleutian Islands

LOCALITY

~~Aleutian Islands~~

Unnak Island - Vicinity Cape Tanak

1938

CHIEF OF PARTY

A. M. Sobieralski, H.&G.E.

U. S. GOVERNMENT PRINTING OFFICE

4948

Applied to new compilation Chart 8861 - Jan 1942 - J.W.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

U. S. COAST & GEODETIC SURVEY
LIBRARY AND ARCHIVES

MAY 9 1939

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 Letter QA-38

REGISTER NO. T4948

State ~~Alaska~~ Aleutian Islands

General locality ~~Aleutian Islands~~ Umnak Island

Locality ~~Umnak Island~~ Vicinity Cape Tanak.

Scale 1:20,000 Date of survey July, Aug., Sept., 1938

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

Chief of Party A. M. Sobieralski

Surveyed by A. M. Sobieralski and J. C. Tison, Jr.

Inked by J. C. Tison, Jr.

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

~~Contours~~ ~~Approximate~~ ~~contour~~ Form line interval 100 feet

Instructions dated February 3, 1938

Remarks: Form lines only shown on this sheet. No

shoreline surveyed.

DESCRIPTIVE REPORT

to accompany

TOPOGRAPHIC SHEET FIELD No. QA-38 T-4948

UMNAK ISLAND, ALASKA - VICINITY CAPE TANAK

PROJECT HT-218

Season 1938

INSTRUCTIONS:

The work was executed in accordance with the Director's Instructions dated February 3, 1938.

EXTENT OF SURVEY:

No shoreline was surveyed on this sheet. It covers the land area of Umnak Island south of Cape Tanak included between Longitudes $167^{\circ} - 58.7'$ W. and $168^{\circ} - 05.0'$ W., and lying north of a broken southern limit line in vicinity of Latitude $53^{\circ} - 26'$ N.

PURPOSE OF SURVEY:

This survey was made in order to "form line" the interior portion of Umnak Island lying between those areas covered on Topographic Sheets Field No. UJ-36 and Field No. Q-38; so providing a chartable picture of the general land configuration which exists southward from Cape Tanak to the first high ground encountered in the interior of the Island.

Form lines submitted on this sheet, together with those submitted on Sheet Field No. Q-38, are intended to supersede all form lines shown on Sheet Field No. N-35. F6599(1935-37)

GENERAL DESCRIPTIONS AND COMMENTS:

The land area shown on this sheet is characterized by a smooth gentle rise from the shoreline southward for a distance of about $4\frac{1}{2}$ nautical miles. This gentle slope appears flat from offshore and is about 4 miles wide between higher ground lying to east and west. The entire area appears to be an old lava bed, now grass covered, but strewn with large fantastically shaped lava masses, plainly visible from off the coast. The old lava flow probably issued from the narrow valley or gorge situated about midway between triangulation stations "Crate 1936" and "Trick 1936", which appears to be a break in the eastern rim of a huge crater-like formation. The only smoking volcano on Umnak Island is located near the western side of this same formation. The large stream emptying to northwest of triangulation station "Texas 1936" has its source in the above mentioned crater, and flows out through a deep canyon or gorge located on the north

side of the 1790 ft. elevation shown in Lat. $53^{\circ} - 28.10'$ N. and Long. $168^{\circ} - 05.16'$ W. The stream has cut a deep ravine throughout its entire course, and the general trend, as it traverses the old lava bed, is visible from offshore.

South of Latitude $53^{\circ} - 29'$ N. there is a steep grass covered slope rising southward to the high ridge on which triangulation station "Trick 1936" is located. The highest peak or projection near the northern part of the ridge is at triangulation station "Trick 1936" and is fairly prominent from offshore.

The 815 ft. elevation in Latitude $53^{\circ} - 32.22'$ N. and Longitude $168^{\circ} - 04.86'$ W. is the highest point at the eastern tangent of a steep semi-circular grass and rock bluff, which bounds the lava flow on the west. From the north this point resembles a sharp rock tooth at a cliff top and is very prominent from offshore.

Ashishik Pt. The old village site indicated on the point of land called "Hidden Point" by the survey party covers a considerable area and was probably at one time the site of a fairly large settlement. Great numbers of red foxes were sighted in the vicinity.

CONTROL:

This survey was controlled entirely by second and third order triangulation stations and topographic signals located on Topographic Sheets Field No. N-35 and Field No. UJ-36: 7-6550(1936)

SURVEYING METHODS:

Except for the area in vicinity of the steep bluff located near the northwest corner of the sheet, the entire sheet was formed from observations made from offshore, using the sextant for cuts and vertical angles. Points along the above mentioned bluff were located by means of planetable and triangulation cuts.

TRAVERSES:

No traverses were run on this sheet.

ELEVATIONS:

The following elevations shown on this sheet were transferred from Topographic Sheet Field No. UJ-36: 7-6550(1936)

1192 ft. at topographic signal "Coe".

320 ft. in Lat. $53^{\circ} - 30.95'$ N. and Longitude $167^{\circ} - 57.40'$ W.

The following elevations were transferred from Topographic Sheet Field No. N-35: 7-6599(1935-37)

127 ft. in Latitude $53^{\circ} - 33.30'$ and Long. $168^{\circ} - 02.30'$.

103 ft. in Lat. $53^{\circ} - 33.30'$ N. and Long. $168^{\circ} - 04.50'$ W.

The following elevations were located by means of triangulation and planetable cuts and computed from two or more vertical angles taken with the planetable or theodolite:

3190 ft. at triangulation station "Tri^{ck} 1936".

All elevations shown north of Latitude $53^{\circ} - 31'$ N. and west of Longitude $168^{\circ} - 04.5'$ W.

All other elevations shown on this sheet were located from sextant angles taken from offshore positions; supplemented by an occasional single triangulation cut. Computations were made from two or more vertical angles taken with the sextant and supplemented by an occasional single vertical angle taken with a theodolite.

FORM LINES:

Form lining was attempted to the general limit of good visibility from offshore. All form lining was done in conjunction with the Chief of Party from observations and sketches made from offshore positions.

JUNCTIONS WITH ADJACENT SURVEYS:

This sheet joins Topographic Sheet Field No. UJ-36 on the east. A slight revision of form lines as originally submitted on that sheet north of Latitude $53^{\circ} - 30'$ N. was necessary in order to effect a satisfactory junction, but otherwise no difficulty was experienced. *Small sections of form lines deleted on original survey T-6550(1936) to conform to and make a satisfactory junction with T-4948 (1938). L.S.S.*

On the west this sheet joins Topographic Sheet Field No. Q-38 *T-4555 (1938)* along Longitude $168^{\circ} - 05'$ W. and also for a short distance west of that Longitude along Latitude $53^{\circ} - 28'$ N. A satisfactory junction was accomplished; form lining on the two sheets being done simultaneously.

Beyond the southern limit of this sheet no surveys have been made.

The northern portion of the area covered by this sheet was originally form lined on Sheet Field No. N-35, *T-6549 (1937)* but form lines on this sheet, *(T-4948 (1938))* and on Sheet Field No. Q-38 *T-6555 (1938)* are intended to supersede all such work; the later form lines being thought more representative of the land configuration.

COMPARISON WITH EXISTING CHARTS:

No detailed chart is available for comparison.

NAMES:

The names "Bering Sea", "Umnak Island", and "Cape Tanak" are from Chart 8802.

The name "Hidden Point" was transferred from Topographic Sheet Field No. N-35. *ASHISHIK POINT is the approved name of this feature.*

No new names were assigned during the course of this survey.

STATISTICS:

Statute miles of shoreline..... 00.0

Area in square statute miles..... 33.6

Respectfully submitted

James C. Tison, Jr.

JAMES C. TISON, JR.
Jr. H. & G. Engr.

Forwarded:

Ray L. Schoppe

RAY L. SCHOPPE, H.&G.E.
Commanding Officer
U.S.C.&G.S.S. SURVEYOR

APPROVAL SHEET

to accompany

DESCRIPTIVE REPORT FOR TOPOGRAPHIC SHEET FIELD No. QA-38

Topographic Sheet Field No. QA-38 ^{T-4948(1938)} and its accompanying descriptive report have been reviewed and examined and are hereby approved.

It is recommended that form lines shown on this sheet ^{T-4948-1938} and on Topographic Sheet Field No. Q-38 ^{T-6555(1938)} supersede all form lines originally submitted on Sheet Field No. N-35. ^{T-6599(1935-37)}

A. M. Sobieralski

A. M. SOBIERALSKI, H.&G.E.
Chief of Party

Remarks.

Decisions

1	USGB decision	File No. 535 675
2		535 675
3		535 680
4	USGB decision	535 680
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GEOGRAPHIC NAMES

Survey No. **T-4948**

GEOGRAPHIC NAMES		On Chart No. 8802		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	
Name on Survey		A,	B,	C,	D	E	F	G	H	K							
<u>Bering Sea</u>		✓														1	
<u>Cape Tanak</u>		✓														2	
<u>Ashishik</u>																3	
<u>Hidden Point</u>																4	
<u>Umnak Island</u>		✓														5	
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<u>Names underlined</u>																25	
<u>in red app'd</u>																26	
<u>by GHE</u>																27	
<u>7/24/39</u>																28	

MEMORANDUM

IMMEDIATE ATTENTION

SURVEY
 DESCRIPTIVE REPORT } ~~XXXXX~~
~~PHOTO STAT OF~~ } No. T-4948

{ received May 8, 1939
 { registered June 14, 1939
 { 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. 4948 (1938) FIELD NO. QA-38

Vicinity of Cape Tanak, Umnak Island, Aleutian Islands
Surveyed in July, August, September 1938, Scale 1:20,000
Instructions dated February 3, 1938.

Plane Table Survey

Cloth Mounted

Chief of Party - A. M. Sobieralski.
Surveyed by - A. M. Sobieralski and J. C. Tison, Jr.
Inked by - J. C. Tison, Jr.
Reviewed by - Leo S. Straw.
Inspected by - H. R. Edmonston.

1. Junctions with Contemporary Surveys.

The junctions with T-6550 (1936) on the east and T-6555 (1938) on the west are satisfactory.

No discrepancy exists between the form lines of the present survey and the shoreline of T-6599 (1935-37) and T-6550 (1936).

2. Comparison with Prior Surveys.

T-6599 (1935-37) scale 1:20,000, aluminum mounted.

This survey falls within the limits of the present survey from long. 168° 05' eastward and from latitude 53° 30' northward. The condition of the survey is discussed in paragraph 1 of the review (T-6599 (1935-37)). The shoreline is sufficiently accurate for charting purposes, but the form lines are far below the standard of accuracy and as recommended by the chief of party, should be superseded by the form lines on the present survey within the common area.

3. Comparison with Chart 8802 (latest print dated Dec. 21, 1939).

Topography.

Within the limits of the present survey the charted shoreline is from T-6599 (1935-37) and T-6550 (1936). No elevations are charted from T-6599 (1935-37). However, the two elevations, 3190 feet in latitude 53° 27.25', longitude 168° 03.07', and 3318 feet in latitude 53° 25.9', longitude 168° 02.9' were charted from the present survey prior to review.

4. Condition of Survey.

This is a form line survey, consequently the shoreline is shown by a dashed black line and is from T-6599

(1935-37), and T-6550 (1936). The parallel dashed black line extending from the shore inland represents the course of streams which have cut ravines or canyons through the lava bed which covers this area.

The descriptive report is comprehensive and contains a good description of the area.

Form Lines.

The form lines are based on about three-fifths of the number of elevations, including those transferred from other surveys covering the same area, as required by paragraph 21 of the Topographic Manual; however, considering the scale of the chart they are adequate for charting purposes.

Field Drafting.

The field drafting is satisfactory.

5. Compliance with Instructions for the Project.

Satisfactory.

6. Additional Field Work Recommended.

No additional work is required.

7. Superseded Surveys.

T-6599 (1935-37), (Form lines only).

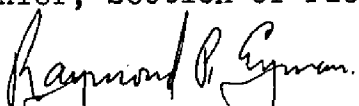
Examined and approved:



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



K. T. Adams,
Chief, Division of Charts.



Chief, Section of Field Work.



Chief, Division of H.&T.