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U. S. COAST & GEODETIC SURVEY  
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6277

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PURSUANT TO DOC SYSTEMATIC REVIEW  
GUIDELINES AS DESCRIBED IN SECTION  
3.3(a), EXECUTIVE ORDER 12356.  
FORM 504  
REV. APRIL 1935  
DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

~~Topographic~~ } Sheet No. 2535 (DISCOVERER)  
~~Hydrographic~~ } Additional Work 1936 & 37  
by SURVEYOR & Launches.

Alutian Islands  
State ~~ALASKA~~

LOCALITY

~~ALUTIAN ISLANDS~~

~~NORTH COAST, UMNAK ISLAND:~~  
Ashishik  
Cape Tanak to Hidden Point

193 5-6 & 7

CHIEF OF PARTY

A.M. Sobieralski, Commanding Officer,  
~~U.S.C. & G.S. Ship SURVEYOR~~

U. S. GOVERNMENT PRINTING OFFICE

CONFIDENTIAL  
6277

8

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

REG. NO.

HYDROGRAPHIC TITLE SHEET

The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. 2535-6-7 ~~DISCOVERER~~  
~~Additional Work, U.S.C.&G.S.S. SURVEYOR & Launches~~  
REGISTER NO. H 6277

State ALASKA Aleutian Islands

General locality ALEUTIAN ISLANDS Umnak Island

Locality North Coast, Umnak Island Cape Tanak to Hidden Point  
Ashishik  
Aug., 1935, June, 1936.

Scale 1:20,000 Date of survey Aug., Sept., 1937

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

Chief of Party A. M. Sobieralski

Surveyed by G.L.B.; I.T.S. & I.R.R.

Protracted by J. C. Ellerbe

Soundings penciled by J. C. Ellerbe

Soundings in fathoms ~~feet~~

Plane of reference MLLW

Subdivision of wire dragged areas by

Inked by Francis A. Kelly

Verified by Francis A. Kelly

Instructions dated April 13, 1934

Remarks: Project HT 176

## NOTE

In August 1935, the area around Cape Tanak, i.e., the topography and hydrography (a, b, and c days, red) eastward of long.  $168^{\circ} 05'$  was surveyed by the DISCOVERER. This work was begun in an effort to prove or disprove the existence of a reported sunken rock off Cape Tanak but more important work in other areas of the project did not allow sufficient time to complete the remainder of the present survey.

In April 1936, the smooth sheets and records were transferred to the SURVEYOR for completion.

In June 1936, the SURVEYOR executed the hydrography (A day, red) in the vicinity of lat.  $53^{\circ} 35.5'$ , long.  $168^{\circ} 09.5'$ . In this work, triangulation station TANAK in long.  $168^{\circ} 00'$  was reobserved and the observation found to differ considerably from the DISCOVERER'S<sup>1935</sup> position. The work was then postponed until a check on the position of station TANAK and adjacent stations could be made.

In August-September 1937, the SURVEYOR completed the inshore hydrography (a, b, and c day, blue) in the vicinity of Ashishik Point. Adjustments required in the triangulation observations necessitated a change in the projection of the previous 1935 hydrography and the entire work was therefore replotted on a new smooth sheet.

Harold W. Murray.

### Authorities:

Descriptive Reports of  
H-6277 and T-6599  
(1935-36-37, DISCOVERER  
and SURVEYOR)

SEE ALSO DISCOVERER'S D. R. ATTACHED HERETO

DESCRIPTIVE REPORT

to accompany

HYDROGRAPHIC SHEET No. 2535 (DISCOVERER) 4-6277

Scale 1:20,000

Additional Work by U.S.C.&G.S.S. SURVEYOR & Launches

A. M. SOBIERALSKI, Commanding, Chief of Party

Project HT 176

The additional work on this sheet was done in accordance with the Director's Instructions to the Commanding Officer, U.S.C.&G.S.S. SURVEYOR, dated April 13, 1934. ✓

Two sounding Volumes, a Topographic Sheet and a smooth sheet were transferred from the Commanding Officer of the DISCOVERER to the Commanding Officer of the SURVEYOR, in April, 1936. ✓

Due to the fact that the DISCOVERER'S survey was controlled by one triangulation station only (i.e., TANAK) whose position as determined by the SURVEYOR'S observations differed considerably from the DISCOVERER'S position; the additional work was postponed until a check on the positions of TANAK and adjacent stations could be made. ✓

For the adjustments made see Descriptive Report for Topographic Sheet Field Letter N-35 (DISCOVERER) submitted by J. Laskowski, Jr. H.&G. Engr. ✓

Since it was impracticable to show the adjustments on the smooth sheet transferred by the DISCOVERER, a new sheet was prepared. The DISCOVERER'S smooth sheet and Descriptive Report are also being forwarded. ✓

SURVEY METHODS:

The positions of all soundings were determined by sextant fixes on objects or signals on shore. All signals were located by triangulation or plane table methods, in accordance with standard practice. ✓

All depths were determined by fathometer, wire or hand lead. On the SURVEYOR fathometer No. 1, Type 312, Serial 312 104 AB was used. All fathometer soundings were corrected for temperature, salinity, etc. in accordance with the Hydrographic Manual and Field Memorandum No. 3 dated June 11, 1936. The corrections were computed as set forth in the Fathometer Report for the 1937 Season. A copy of the corrections applicable to this work is attached to Volume No. 3, this sheet. ✓

DISCREPANCIES:

There are no cross lines on this sheet. The soundings on junctions between various sounding units agree closely. ✓

The junctions with adjacent sheets are satisfactory. ✓

DANGERS:

3 The only offshore danger is a shoal area centered at Latitude 53° 24', Longitude 168° 10' with a least depth of 3 4/6 fathoms at Latitude 53° 34', Longitude 168° 10.35'. The kelp on this pinnacle trows under at all times except slack water. The other high spots on this shoal are marked by heavy kelp. Light tide rips and swirls occur over the shoal on changes of tide.

ANCHORAGES:

The bight between Cape Tanak and Hidden Point furnishes good anchorage in southerly weather. As the prevailing winds in summer are southwest there are frequently long intervals when this bight is comparatively smooth.

*Ashishik Point*  
~~Hidden Point~~ would make a good site for a lighthouse and fog station, not only because of its relation to the track followed by vessels and its wide angle of visibility, but also because it is comparatively level, landings can be made except in northerly weather, and there is a good supply of water nearby.

COMPARISON WITH PREVIOUS SURVEYS:

There are no previous surveys in this area.

GEOGRAPHIC NAMES: ✓ GHE

The narrow point at Latitude 53° 34', Longitude 168° 05.2' was given the name of ~~HIDDEN POINT~~. The point is low and blends in with higher land when seen from off shore.

*Ashishik Pt.*

Respectfully Submitted

*Ira T. Sanders*

IRA T. SANDERS  
 Jr. H.&G. Engr.

Approved & Forwarded

*A. M. Sobieralski*

A. M. SOBIERALSKI  
 Commanding Officer  
 U.S.C.&G.S.S. SURVEYOR

LIST OF SIGNALS

to accompany

HYDROGRAPHIC SHEET No. 2535 (DISCOVERER) H-6277TRIANGULATION LOCATIONS

<u>TANAK</u>	1935-37
Join	1936-37
Blot	1935-37
Fox	1935-37
CLEAR	1935-37
CHAGAK	1935-37

TOPOGRAPHIC LOCATIONS

Topographic Sheet Field Letter N 35 (DISCOVERER)  
T-6599

All Topographic Signals are from above named sheet.

STATISTICS

to accompany

HYDROGRAPHIC SHEET No. 2535 (DISCOVERER) H-6277

<u>Date</u>	<u>Day</u>	<u>Vol.</u>	<u>No. Pos.</u>	<u>No. Soundings</u>	<u>Statute Miles</u>
<u>DISCOVERER'S Motor Sailer</u>					
8/25/35	a	1	115	586	19.2
8/29/35	b	1	195	421	28.9
8/30/35	c	1-2	109	293	17.7
<u>SURVEYOR</u>					
7/27/37	A	3	258	948	85.1
<u>SURVEYOR'S Launch No. 4 &amp; Motor Sailer</u>					
6/8/36	a	4	108	218	17.7
8/11/37	b	4	178	460	27.4
7/28/37	c	5	237	387	19.0
	Totals		<u>1200</u>	<u>3313</u>	<u>215.0</u>

Area in square statute miles = 28.0

TIDAL NOTE

to accompany

HYDROGRAPHIC SHEET No. 2535 (DISCOVERER) H-6277

For the additional work done by the SURVEYOR'S parties on this sheet during the 1936-1937 Seasons, tides recorded by the portable gage at Chernofski Harbor, Unalaska Island, Alaska, were used for reducing soundings, except "c" day, Motor Sailer, July 28, 1937, which were reduced from values obtained from Standard Gage No. H 248 located at Dutch Harbor, Unalaska Island, Alaska.

The work done by the DISCOVERER'S parties was reduced from values obtained from the portable gage located at Skan Bay, Unalaska Island, Alaska during the 1935 Season. Data concerning this gage, other than its location, is not available.

CHERNOFSKI HARBOR GAGES

No. H 201, 1936, Nos. 166 &amp; 159, 1937

Latitude	53°	23.7' N
Longitude	167°	32.0' W
MLLW (1936)		3.3 ft.
Highest tide recorded, 1936, October 1		7.9 ft.
Highest tide recorded, 1937, July 8		8.4 ft.
Lowest tide recorded, 1936, July 17		1.6 ft.
Lowest tide recorded, 1937, July 6		1.4 ft.

DUTCH HARBOR GAGE

No. H 248, 1937

Latitude	53°	53.5' N
Longitude	166°	32.2' W
MLLW (1937)		3.7 ft.
Highest tide recorded, 1937, June 15, July 4		8.3 ft.
Lowest tide recorded, 1937, June 8 & 9		2.0 ft.

SKAN BAY GAGE  
1935

Latitude	53°	36.35' N
Longitude	167°	02.55' W




APPROVAL SHEET

to accompany

HYDROGRAPHIC SHEET No. 2535 (DISCOVERER) H-6277

This sheet and the records have been examined and  
are approved.



A. M. SOBIERALSKI  
Commanding Officer  
U.S.C&G.S.S. SURVEYOR

## TIDE NOTE FOR HYDROGRAPHIC SHEET

April 30, 1938.

Division of Hydrography and Topography:

✓ Division of Charts: Attention: Mr. E. P. Ellis.

Tide Reducers are approved in  
5 volumes of sounding records for

HYDROGRAPHIC SHEET 6277

Locality Cape Tanak to Hidden Point, Umnak Island, Aleutian Islands

Chief of Party: H. B. Campbell, 1935 and A. M. Sobieralski, 1937.

Plane of reference is mean lower low water reading

6.7 ft. on tide staff at Skan Bay

10.5 ft. below B.M. 1

3.7 ft. at Dutch Harbor

12.6 ft. below B.M. 1

3.3 ft. at Chernofski Harbor

8.8 ft. below B.M. 1

Height of mean high water above plane of reference is 3.6 feet at Skan Bay; 3.4 feet at Dutch Harbor and Chernofski Harbor.

Condition of records satisfactory except as noted below:



Chief, Division of Tides and Currents.

# GEOGRAPHIC NAMES

Survey No. H-6277

Name on Survey	Source of Name										USCP
	A	B	C	D	E	F	G	H	K		
	On Chart No. 8802	On previous survey No.	On U. S. Quadrangle Maps	From local information	On local Maps	P. O. Guide or Map Publishers Direct.	Rand McNally Atlas	U. S. Light List			
<del>Ashishik</del>											
<del>Hidden Point</del>						Ashishik Cape					1
<u>Cape Tanak</u>	✓					✓			✓		2
<u>Umnak Island</u>	✓										3
<u>Bering Sea</u>	✓										4
											5
<u>Boiling Pinnacles</u>											6
											7
											8
											9
											10
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											21
											22
											23
											24
Names underlined in red approved											25
by <u>JJE</u> on <u>5/9/38</u>											26
											27

Remarks

Decisions

	Remarks	Decisions
1	* - See Tebenkofs Atlas sh. XXVI - Very probably the same Pt. as listed in Bakers Dict. see also D.R. pg. 2	
2		
3		USGB decision
4	For Title only	USGB decision
5		
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Field Records Section (Charts)

HYDROGRAPHIC SHEET NO. **H6277** .....

The following statistics will be submitted with the cartographer's report on the sheet:

Number of positions on sheet	1200
Number of positions checked	14
Number of positions revised	2
Number of soundings recorded	3313
Number of soundings revised	46
Number of signals erroneously plotted or transferred	0

Date: Aug. 11, 1938

Verification by *Francis B. Kelly*

Time:  $74\frac{1}{2}$  hrs.

Review by *Harold W. Murray*

Time: 4 "

Verifier's Corrections by ..

..  $0\frac{3}{4}$  "

HYDROGRAPHIC SURVEY NO. H-6277

Smooth Sheet Yes

Boat Sheet Two

*no Boat sheet for "c" day. It will probably  
come in with sheet 2337 (Sunway) Kelly  
See P 4 vol 5*

Records; Sounding 5 Vols., Wire Drag      Vols., Bomb      Vols.

Descriptive Report Yes

Title Sheet Yes

List of Signals Page#3, D.R.

Landmarks for Charts (Form 567) None

Statistics Yes

Approved by Chief of Party Yes

Recoverable Station Cards (Form 524) None

Special Chart for Lighthouse Service  
(Circular Nov.30, 1933) None

Hydrography: Total Days 7; Last Date August, 11, 1937

Remarks \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

# MEMORANDUM

## IMMEDIATE ATTENTION

SURVEY  
 DESCRIPTIVE REPORT  
~~PHOTO STAT COPY~~

No. H-6277

~~NO COPY~~

received April 15, 1938  
 registered April 25, 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
20			
22			
24			
25	✓	<i>TRB</i>	Page 2
26			
30			
40			
62			
63			
82			
83			
88			
90			

RETURN TO

82	T. B. Reed
----	------------

✓ *TBR*

To Accompany H6277

Form 504  
Ed. June, 1928

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY  
R. S. Patton, Director

U. S. COAST & GEODETIC SURVEY  
LIBRARY AND ARCHIVES  
APR 18 1938

State: Alaska

Ass. No. \_\_\_\_\_

**DESCRIPTIVE REPORT**

~~Topographic~~ } Sheet No. 2535  
Hydrographic }

LOCALITY

Aleutian Islands

Umnak Island

Cape Tanak

19.35

CHIEF OF PARTY

H. B. Campbell



DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

REG. NO.

HYDROGRAPHIC TITLE SHEET

The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. ~~1533~~.....

REGISTER NO.

State Southwest Alaska.....

General locality Unuk Island (Aleutian Islands).....

Locality Cape Tanak.....

Scale 1 - 20,000 Date of survey August, 1935

Vessel DISCOVERER.....

Chief of Party E. B. Campbell.....

Surveyed by I. R. Rubottom.....

Protracted by I. R. Rubottom.....

Soundings penciled by I. R. Rubottom.....

Soundings in fathoms ~~xxxx~~

Plane of reference M. L. L. W......

Subdivision of wire dragged areas by.....

Inked by.....

Verified by.....

Instructions dated April 15, 1934

Remarks: This survey covers only a small area inshore  
around Cape Tanak.



shoaling that extends outward from the beach. A few stalks of growing kelp were seen at the above position while the regular system of lines were being run. Later in the day an effort was made to relocate this and investigate it, but the sea had become choppy in the meantime and the kelp could not be found. Approximately <sup>20 min.</sup> one hour was spent feeling around with the lead in this area, but no shoaler depth was found than had been obtained previously. The party did no further work on this sheet afterwards, and had no chance to further investigate the area.

No notes in the records about this kelp. Kelly

Kelp plotted on smooth sheet by authority of this par. H.W.M.

Page 69  
"c" day  
Vol. No 1

It is believed that there is a shoaler depth at the position of the kelp, and it should be investigated again.

Otherwise the area covered by this survey is complete.

DISCREPANCIES:

No previous survey of this area.

ANCHORAGES:

See Coast Pilot Notes for 1935, an extract of which is attached to this report.

DESCRIPTIONS OF HYDROGRAPHIC STATIONS:

Stations <sup>NOT</sup> SEE and NECK are permanently marked. For description refer to topographic report field sheet No. <sup>T-6599</sup> N 1935.

TIDAL DATA:

No tide gage or staff was installed in the vicinity of Cape Tanak. The curves for the observations at Bogoslof Island and at Skan Bay were compared and found to agree for time and height. Since Cape Tanak was approximately between the two places, the observations at Skan Bay were used for reducing the soundings.

Respectfully submitted,

Ira R. Rubottom  
Jr. H. & G. E., C. & G. Survey.

STATISTICS

Date	Day	Vol.	Soundings		Pos.	Statute Miles			Boat	
			Wire	H. L.		Wire	H. L.	Total		
Aug.27	a	1	21	565	115	1.5	17.7	19.2	S. M. S.	
"	29	b	1	379	42	195	27.6	1.3	28.9	"
"	30	c	1&2	-125	168	109	10.8	6.9	17.7	"
Totals.....			525	775	419	39.9	25.9	65.8		

COAST PILOT NOTES

## North coast Umnak Island, Cape Tanak.

"The survey of the north coast of Umnak Island was not completed. It is recommended that Cape Idak should be given a clearance of 1 mile and Cape Tanak and Cape Chagak should be cleared by 3 miles. Indications of a shoal area was found between Cape Tanak and Cape Chagak inside the above distance.

"Anchorage can be found  $3/4$  mile offshore in the bight west of Cape Tanak in 20 fms. (36.6m.), sandy bottom. This is a fair weather anchorage only.

"The positions of Otter Point, Cape Idak, Cape Tanak, and Cape Chagak, as shown on the chart, are in error. They should be moved approximately 5 miles to the westward."

The boat sheet, records, and smooth sheet, for the area covered by this report, are being turned over to the SURVEYOR for completion, as per Director's letter 22-RS,1995 DI4, dated February 20, 1936. A tracing, made from the smooth sheet, of the work accomplished is being forwarded. F. E. #4 (1936)

The unfinished topographic sheet is also being turned over to the SURVEYOR, and the descriptions of Topographic Stations NECK, SEE, and NOT are therefore enclosed herewith.

Respectfully forwarded,

H. B. Campbell,  
per J. M. Snook.

## Veinier's Report on H 6277

The records conform to the requirements of the General Instructions except as noted in the Rev.

Most of the depth curves can be drawn.

The field plotting was well done; only 2 positions had to be changed. However in ~~the~~ penciling the soundings 4 feet was called  $\frac{1}{2}$  fathom in all cases.

The junction with H 6256 on the east is satisfactory. The northern junction has not been made since H 6257 is unvisited and Sheet 81-37 has not been recd.

There is no boat sheet for "C" day (blue). It will probably be received with sheet ~~25-37~~ 23-37.

On lat  $53^{\circ} 34.2$  long  $167^{\circ} 58.9$  the Ste. Rose believed there was a shoaler depth than that found and recommended additional work but the "Surveyor" did not return to the area. *W.L.D. in rev.*

Francis B. Kelly

August 11, 1938.

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 6277 (1935-37) FIELD NO. 2535-6-7

Cape Tanak to Ashishik Point, Umnak Island, Aleutian Islands  
Surveyed in 1935 - 37, Scale 1:20,000  
Instructions dated April 13, 1934 (SURVEYOR)

Hand Lead, Fathometer and  
Machine Soundings.

3 Point fixes on shore signals.

Chief of Party - A. M. Sobieralski.  
Surveyed by - I. R. Rubottom, I. T. Sanders and G. L. Bean.  
Protracted by - J. C. Ellerbe.  
Soundings plotted by - J. C. Ellerbe.  
Verified and inked by - F. B. Kelly.

1. Condition of Records.

The records are neat and legible and conform to the requirements of the Hydrographic Manual except that the size of the names of triangulation stations and topographic signals is about 4 mm. and is too large.

The Descriptive Report is clear and satisfactorily covers all items of importance.

2. Compliance with Instructions for the Project.

The plan, character and extent of the survey satisfy the instructions for the project.

3. Shoreline and Signals.

The shoreline and signals originate with plane table survey T-6599 (1935-37).

4. Sounding Line Crossings.

Agreement of such cross lines as result from the work as well as the adjacent lines are satisfactory.

5. Depth Curves.

The usual depth curves may be satisfactorily drawn including portions of the 1, and 2 fathom curves.

6. Junctions with Contemporary Surveys.

a. The junction on the east with H-6256 (1936-37) is satisfactory.

b. The junction on the north and northeast with H-6257 (1936-37) will be considered in the review of that survey.



- c. The junction on the north and northwest with Field Sheet No. 81-37 will be considered when that sheet is received in the office.
- d. There are no contemporary surveys to the westward of the present survey.

7. Comparison with Prior Surveys.

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

8. Comparison with Chart 8802 (New Print dated Dec. 13, 1937).

The only depths charted in this area are one 48 fathom and two 9 fathom soundings which originate with Field Examination No. 4 of 1936 DISCOVERER. This advance information from the present survey is substantially correct as to depth and position.

9. Field Plotting.

Field protracting and plotting were accurate and conform to the requirements of the Hydrographic Manual except that in the plotting of fractional soundings, 4 feet was consistently plotted as 1/2 fathom in depths up to 7 fathoms instead of 4/6 fathoms. These were corrected in the office.

10. Additional Field Work Recommended.

Attention is called to the Descriptive Report of the DISCOVERER'S work, page 1, "Dangers", par. 2 and 3, wherein it is stated that a shoaler depth may exist in lat. 53° 34.2', long. 167° 58.9' and should be further investigated.

11. Superseded Prior Surveys.

There are no prior surveys made by this Bureau in this area.

12. Reviewed by - Harold W. Murray, Aug. 17, 1938.

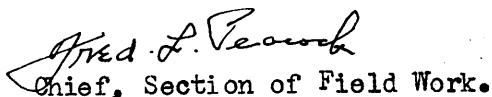
Inspected by - Leo S. Straw,

Examined and approved:




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

K.T. Adams  
Chief, Division of Charts.



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

  
Chief, Division of H. & T.

Applied to Chart 8861 - Jan 1942 - JTW