

4889

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

State: Alaska  
Aleutian Islands

DESRIPTIVE REPORT

Topographic } Sheet No. "B"  
Hydrographic }

LOCALITY

Unalaska & Amaknak Islands  
Dutch Harbor  
Hliulik and Vicinity

1934

CHIEF OF PARTY

H. B. Campbell

U. S. GOVERNMENT PRINTING OFFICE: 1928

4889

*dated May 5, 1936*

*Applied to drawing of Chart № 9008*  
~~№ 9007~~

*April 1936 S.B.M.*  
~~S.B.M.~~

*Applied to new compilation of Chart № 9007*

*July 1936 S.B.M.*

*Applied to drawing of Chart № 8860*

*Dec 1936 S.B. Maize*

*Applied to drawing of Chart No 8802*

*S. B. Maize June 1937*

*Applied to new compilation of chart No. 9007, (extended); S. Pisegani Aug. 1938*

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.

Field No. "B" 4889

REGISTER NO.

State Alaska, Aleutian Islands<sup>U</sup>

General locality Unalaska<sup>e</sup> Amaknak and Vicinity Islands

Locality Dutch Harbor and Unalaska<sup>e</sup> Vicinity

Scale 1:5,000 Date of survey July and August, 19 34

Vessel U.S.S. DISCOVERER

Chief of party H.B. Campbell

Surveyed by Henry O. Fortin

Inked by Henry O. Fortin

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

~~Contours~~ Approximate contours Form line interval 50 feet

Instructions dated April 19, 19 34

Remarks:

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DESCRIPTIVE REPORT

TO ACCOMPANY

TOPOGRAPHIC SHEET "B".

U.S.C. & G.S.S. DISCOVERER

H.B. Campbell, Commanding.

Season of 1934 Project H.T. No. 177

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DESCRIPTIVE REPORT  
TO ACCOMPANY  
TOPOGRAPHIC SHEET "B".

U.S.C. & G.S.S. DISCOVERER H.B. Campbell, Commanding.

Season of 1934 Project H.T. No. 177

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AUTHORITY

This survey was made in compliance with the Director's instructions dated April 19, 1934.

PURPOSE

The purpose of this topographic survey was a revision of the old work on sheet number T - 2236, 1896, and to furnish adequate control for hydrography done within the limits of the sheet.

LIMITS

This sheet takes in all the topographic features of the southern end of Amaknak Island, connecting with topographic sheet "A" at hydrographic signals Ism and Bis.

On Unalaska Island this sheet connects properly with hydrographic signal Ham, and terminates at hydrographic signal Nit at the north entrance to Captain's Bay.

CONTROL

The topography was controlled by second and third order triangulation of the 1896 - 1901, and 1934 seasons. Sufficient triangulation stations were established to permit a quick and accurate location on the planetable.

*Unalaska*  
The so-called Dutch Harbor or existing datum was used in determining locations of stations.

SURVEY METHODS

The usual plane table survey methods were used. In general the

topographic signals were located by three or more cuts from triangulation stations and verified by stadia when the shoreline was rodded in.

A combination transverse and skip set up method was used in locating all shore line, low water line, and other topographic details.

All closures were within the limits as allowed by the required standard of accuracy, and all rocks and reefs were located either by stadia, three or more intersection cuts, or by two good sets of sextant angles.

#### FORM LINES

One hundred and two elevations were determined on this sheet; forty-one on Amaknak Island, and sixty-one on Unalaska Island. Proper connections were made with topographic sheet number "A" and as accurately as possible with the old survey (bromide number T - 2236).

Although that section of the sheet just south and east of the large lake back of Unalaska was sketched in, not sufficient elevations were obtained to permit the continuation of solid form lines.

#### GENERAL DESCRIPTION

The shoreline and slopes back of the shoreline on both Amaknak and Unalaska Islands are heavily covered with grass, reindeer moss, and low shrubbery to about an elevation of 1600 feet where the mountains commence to get bare. Hatchures on the sheet designate the cliffs.

The lake back of the Naval Radio Station is used as a water reservoir and supplies water for both Dutch Harbor and the Radio Station. The lake just west of the U.S.G.L.O. No. 1945 is used as a water reservoir for the town of Unalaska.

There are two groves of evergreen trees on this sheet; one on

Expedition Island, and one just east of the old Amaknak Indian Village Site. These trees, which are known as Sitka Spruce, were brought over from Sitka in 1805 by a Russian Orthodox Priest. At the present time they are only about twenty-five feet high, and there aren't any signs of their seedlings propagating..

#### ANCHORAGES

All anchorages on this sheet are properly covered in the Alaska Coast Pilot, Part II, and in the Coast Pilot Notes as remitted to the office by the U.S.S. DISCOVERER of the 1934 season.

#### DISCREPANCIES AND COMPARISONS WITH PREVIOUS SURVEYS

The discrepancies in elevations and their position has been taken up in the descriptive report of sheet "A".

The discrepancies in shoreline as compared with bromide T - 2236 range from a few to 35 meters, the greatest error being at the rounding point just south of Agnes Beach, and at the rock between the two high water south Amaknak Rocks. This rock appears to be about thirty-five meters closer to hydrographic signal Key.

The Flagstaff as shown on Chart No. 9008 at Dutch Harbor no longer exists and should be expunged from the chart.

The Post Office name of Iliuliuk is known as Unalaska to all mariners and inhabitants of this locality. I believe that the name of Iliuliuk leads to some confusion on the charts and should be changed to Unalaska.

#### WELL ESTABLISHED LOCAL NAMES

Mt. Newhall, elevation 1651, was the name given to the mountain just west of longitude 166° 30' 00".

Dr. Newhall was a deceased physician who practiced at Unalaska years ago.

Margaret Bay is a well established local name, and was given to

the little bay at the northwest side of Iliuliuk Harbor.

Xatacyan Lagoon was the name given to the salt lagoon connecting onto Margaret Bay. The old Xatacyan Indian Village is located at the head of this lagoon.

Agnes Beach, being a well established local name, was given to the little beach at hydrographic signal Go, at the south entrance to Iliuliuk Harbor.

#### DISTORTION AND REMARKS

The distortion on this sheet amounted to about 10 meters per nautical mile. The remarks regarding this sheet are the same as discussed in the report for "A".

#### MAGNETIC OBSERVATIONS

A magnetic observation was made with the declinoire at triangulation station Grave<sub>2</sub>, 1934.

#### LANDMARKS

A list of landmarks on form 567 is appended. No additional description is necessary.

#### RECOVERABLE PLANE TABLE POSITIONS

A list of recoverable plane table positions is appended; also description of same on form 524.

Respectfully submitted,

*Henry O. Fortin*

Henry O. Fortin,  
Jr. H. & G. Engineer.

Approved and forwarded:

*H.B. Campbell*

H.B. Campbell,  
H. & G. Engineer,  
Chief of Party.

REMARKS

The two high water rocks as shown on Chart No. 9008, Latitude 53° 52' (1150 meters) North, and Longitude 166° 32' (866 meters) West do not exist and should be expunged from the chart. There are some low water rocks in this vicinity, the description of which is taken up in the descriptive report for the hydrographic sheet covering this locality.

LIST OF STATISTICS

Statute miles of high water line - - - - -	12.6
Statute miles of low water line - - - - -	2.3
Statute miles of lakes and rivers - - - - -	5.8
Statute miles of railroads, roads, fences, telephone lines, etc.	4.6
Area, square statute miles - - - - -	8.6

LIST OF RECOVERABLE PLANE TABLE POSITIONS

Name and Description	Latitude		D.M. Meters	Longitude		D.P. Meters	Elev.	Topo Sh. Letter
	o	'		o	'			
Magnetic Sta. 1934	53	53	804	166	32	105	100	"B" 1934
NIX E Gable Ware- house.	53	53	168	166	32	28	12	"
POT High Pt. of Rock.	53	52	1742	166	32	128	8	"
SKY E Gable Out- house	53	52	1679	166	32	318	8	"
MIS Flagpole on brown house.	53	52	890	166	31	772	12	"
JAY Highest chim- ney on Mission.	53	52	982	166	31	986	15	"
MAR Flagpole cor- ner of US Mar- shall's house.	53	52	1070	166	32	29	20	"
HOS Flagpole on Hospital.	53	52	1379	166	32	450	25	"
MA Slatted range signal on Wharf.	53	52	1582	166	32	536	10	"
OR S Gable Ware- house, near Sheep Camp Dock.	53	52	1762	166	32	413	8	"
LEG Flagpole on Expedition I.	53	52	1397	166	33	150	20	"
GEM N Gable of shack back of fishing dock.	53	52	1123	166	33	24	10	"

Name and Description	Latitude o '	D.M. Meters	Longitude o '	D.P. Meters	Elev.	Topo Sh. Letter.
COG Center Blue window on W side of shack.	53 52	1212	166 32	801	5	"B" 1934
GO W Gable of warehouse on fishing dock.	53 52	774	166 32	693	10	"
JAN E Gable of shack on fish- ing dock.	53 52	364	166 33	446	12	"
KEY Highest pt. of most easterly one of S Amak- nak rocks.	53 51	1724	166 33	412	15	"
GAP Highest pt. of Cave Rock.	53 53	398	166 33	404	39	"
V Highest pt. of rock, just S of Arch Rock.	53 52	1336	166 34	11	20	"
TOM Most westerly and highest pt. of Iliuliuk Reef.	53 52	1527	166 32	219	6	"
U.S.G.L.O. No. 1945.	53 52	850	166 32	236	2	"



Date: March 12, 1935 GEOGRAPHIC NAMES  
ALASKA

Survey No. T4889  
9007 & 9008  
Chart No. 8802 & 8860

Diagram No. 8802-2

Approved by the Division of Geographic Names, Department of Interior. \*

Referred to the Division of Geographic Names, Department of Interior. R

Under investigation. Q *Names underlined in red approved Mar. 25, 1935*  
*Harlow Bacon*

Status	Name on Survey	Name on Chart	New Names in local use	Names assigned by Field	Location
	<u>Dutch Harbor</u> ✓	same			
	<u>Dutch Harbor</u> ✓	"			
	<u>Cave Rock</u> ✓	"			
	<u>Xatacyan Lagoon</u> ✓		<u>Xatacyan Lagoon</u>		
	<u>Margaret Bay</u> ✓		<u>Margaret Bay</u>		
	<u>Naval Radio Sta. Reservoir</u> ✓				
	<u>Rocky Pt.</u> ✓				
	<u>Iliuliuk Bay</u> ✓	same			
	<u>Iliuliuk Reef</u> ✓	"			
	<u>Tuscarora Rock</u> ✓	"			
	<u>Iliuliuk</u>	"			
	<u>Unalaska</u> ✓	<del>same</del>	<del>Referred to D.G.N. for reconsideration</del>		O.K. HF
	<u>Iliuliuk Harbor</u> ✓	"			
<u>Expedition I.</u> ?	<u>Expedition I.</u>	<u>Expedition I.</u> ✓			
	<u>Arch Rk.</u> ✓	"			
?	<u>Agnes Beech</u>	-	<u>Agnes Beach</u> ✓		
	<u>Unalaska Lake</u>	-	<u>Unalaska Lake</u> ✓		
	<u>S. Amaknak Rks.</u> ✓	"			
	<u>Amaknak Island</u> ✓	same			
	<u>Unalaska Island</u> ✓	"			
	<u>Mt. Newhall</u>	-	<u>Mt. Newhall</u> ✓		

## REVIEW OF TOPOGRAPHIC SURVEY No. 4888

Title (Par. 56) *Dutch Harbor & Vicinity, Alaska*Chief of Party *H.B. Campbell* Surveyed by *H.O. Fortin* Inked by *H.O. Fortin*Ship *Discoverer* Instructions dated *April 19, 1934* Surveyed in *July-August 1934*

1. The survey and preparation for it conform to the requirements of the Topographic Manual. (Par. 7, 8, 9, 13, 16.) ✓
2. The character and scope of the survey satisfy the instructions. ✓
3. The control and closures of traverses were adequate. (Par. 12, 29.) ✓
4. The amount of vertical control that the Manual specifies for -contours-formlines- was accomplished. (Par. 18, 19, 20, 21, 22, 23.) ✓
5. The delineation of -contours-formlines- is satisfactory. (Par. 49, 50.) ✓
6. ~~There is sufficient control on maps from other sources that were transmitted by the field party to enable their application to the charts. (Par. 28.)~~ *None submitted*
7. ~~High water line on marshy and mangrove coast~~ is clear and adequate for chart compilation. (Par. 16a, 43, 44.) ✓
8. The representation of low water lines, reefs, ~~coral reefs~~ and rocks, and legends pertaining to them is satisfactory. (Par. 36, 37, 38, 39, 40, 41.) ✓
9. Rocks and other important details shown on previous surveys and on the chart were verified. (Par. 25, 26, 27.) ✓  
*See reverse side*
10. ~~The span, draw and clearance of bridges are shown. (Par. 16c.)~~
11. Locations and elevations of summits are given. (Par. 19, 51.) ✓
12. The tree line was shown on mountains. (Par. 16g.) *No trees of any consequence in this area*

NOTE: Strike out paragraphs, words or phrases not applicable and modify those requiring it. Paragraph numbers refer to those in the Topographic Manual. Use reverse side for extending remarks.

Paragraph 9

T1950 (1867)

This is a reconnaissance survey and is superseded by T4889.

T2135 (1871-2)

Comparison of the present survey with T2135 showed two rocks awash East of Expedition Island which were not shown on ~~this sheet~~<sup>T4889</sup> but were picked up by the hydrographic party and are correctly shown on H5684 (1934).

T2236

The present survey checks the survey T2236 very nicely except as noted in the Descriptive Report. Inshore rocks are included in the reef symbol on T4889. The form lines on T4888 do not check the work of T2236 exactly. (For a discussion of these see Descriptive Report of T4889). T4889 supersedes T2236 in part.

Chart 9008

The wrecks on the beach West of Expedition Island have evidently rotted away as they are not shown on the present survey (T4889)

The rocks shown at Lat. 53°-52'.9 Long. 166°30'.75 are shown on H5684 but not on T4888.

13. The descriptive report covers all details listed in the Manual, in so far as they apply to this survey. (Par. 64, 65, 66, 67.) ✓  
*No points for checking distortion shown*
14. ~~The descriptive report also contains additional information required in aere-topography relative to type of photographs, method of compilation and type of ground control.~~
15. The descriptions of recoverable stations and references to shore line were accomplished on Form 524. (Par. 29, 30, 57, 67 except scaling of IMs and DPs, 68.) *22 cards submitted*
16. A list of landmarks for charts was furnished on Form 567 and plotting checked. (Par. 16d, e, 60.) ✓
17. The magnetic meridian was shown and declination was checked. (Par. 17, 52.) *No note of declinatoire having been checked  
Declination East somewhat of that shown on Chart 9008*
18. The geographic datum of the sheet is *Unalaska (Unadjusted)* and the reference station is correctly noted. (Par. 34.)
19. Junctions with contemporary surveys are adequate. ✓  
*Joins T 4888 on the North*
20. Geographic names are shown on the sheet and are covered by the Descriptive report. (Par. 64, 66k.)
21. The quality of the drafting is <sup>*fair*</sup> good. (Par. 31, 32, 33, 35, 36, 37, 38, 39, 40, 41, 42, 45, 46, 47, 48, 49, 50.) ✓
22. No additional surveying is recommended. ✓
23. The Chief of Party inspected and approved the sheet and the descriptive report ~~after review by~~ ✓

24. Remarks:

Reviewed in office by *Chas. R. Bush Jr. May 23, 1936*

Examined and approved:

*E. H. Green*  
Chief, Section of Field Records

*L. O. Tolbert*  
Chief, Division of Charts

*Fred. L. Peacock*  
Chief, Section of Field Work

*Stude*  
Chief, Division of Hyd. and Top.