4888

U. S. COAST & GEODETIC SURVEY
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Ed. June, 1928

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

State: Alaska
Aleutian Islands

DESCRIPTIVE REPORT

Topographic
~~*Hydrographic*~~ } *Sheet No.* "A"

LOCALITY

Unalaska & Amaknak Islands

Dutch Harbor and Vicinity

1934

CHIEF OF PARTY

H. B. Campbell

U. S. GOVERNMENT PRINTING OFFICE: 1930

4888

dated May 5 1936

Applied to drawing of chart No 9008 April 1936 S.B.M.

~~No 9007~~ ~~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 9007 (extended). S. Pisegari Aug 1938.

Form 537a
Ed. Nov., 1929

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. "A" 4888

REGISTER NO.

State Alaska, Aleutian Islands

General locality Unalaska & Amaknak ~~Island~~ Islands

Locality Dutch Harbor and Vicinity

Scale 1:5,000 Date of survey June and July, 1934

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 ~~tops of trees~~

~~Contour, Approximate contour~~, Form line interval 50 feet

Instructions dated April 19, 1934

Remarks:

* * * * * * * * * *

DESCRIPTIVE REPORT

TO ACCOMPANY

TOPOGRAPHIC SHEET "A".

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 "A".

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

Season of 1934 Project H.T. No. 177

* *

AUTHORITY

This survey was made in accordance 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 control for hydrography done within the limits of the sheet.

LIMITS

This sheet extends from hydrographic signal Ism, on Amaknak Island and extends around the north end of Amaknak Island around to hydrographic signal Bis. At both signals a proper connection was made with topographic sheet number "B". (T-4389)

On the East side of Iliuliuk Bay this sheet extends from triangulation station Pinnacle Rock, 1934, to hydrographic signal Ham where a proper connection was made with topographic sheet number "B".

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.

The so called Dutch Harbor or existing datum was used in determing 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 limts as allowed by the required standard of accuracy, and all rocks and reefs were located either by stadia or by three or more intersection cuts.

FORM LINES

Forty-six elevations were determined on this sheet; twenty-three on Amaknak Island, and twenty-three on Unalaska Island. Proper connections were made with topographic sheet number "B", and as accurately as possible with the old survey (bromide number D - 2236).

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.

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 positions on different bromides and charts are quite noticable. However, this can easily be accounted for as the pointings on round hills and mountains at close distances are quite erroneous due to the fact that there aren't any particular land marks to point on, and although it appears that the

pointings are on the highest points, it might be on a ridge or small knoll obstructing the true top of the mountain or hill in question.

The discrepancies in shoreline as compared with bromide T - 2236 range from a few meters to 50 meters, the greatest error being at Ulakta Head, and at the mouth of the stream just north of hydrographic signal Elf, on the Unalaska shoreline.

NAMES ASSIGNED BY FIELD OFFICERS

Mt. Coxcomb was the name suggested for the mountain (1808 feet elevation) just south of triangulation station Pin_2, 1934.

WELL ESTABLISHED LOCAL NAMES

Mt. Ballyhoo, elevation 1589, being a well established local name, was given to the prominent point just southwest of triangulation station $Amaknak_2$, 1934.

DISTORTION AND REMARKS

Due to adverse weather conditions in this locality I don't believe that Whatman's paper is advisable to work on, especially on a scale of 1:5,000. Great care had to be taken in setting up the plane-table and in allowing for distortion which amounted to about 5 meters per nautical mile.

MAGNETIC OBSERVATION

A magnetic observation was made with the declinatoire at triangulation station $South\ Base_2$, 1934.

LANDMARKS

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

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.

LIST OF STATISTICS

Number of statute miles of high water line - - - - - - - - - - -10.3

Number of statute miles of low water line - - - - - - - - - - - 3.0

Number of elevations determined - - - - - - - - - - - - - - - -46.

Area, in square statute miles - - - - - - - - - - - - - - - - 6

Form 567
Ed. Dec., 1929

DIVISION OF CHARTS, FILE NO._____

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

LANDMARKS FOR CHARTS

Seattle, Washington

February 28, 19 35

DIRECTOR, U. S. COAST AND GEODETIC SURVEY:

The following determined objects are prominent, can be readily distinguished from seaward from the description given below, and should be charted.

H.B. Campbell
H.B. Campbell Chief of Party.

DESCRIPTION	POSITION					METHOD OF DETERMINATION	CHARTS AFFECTED
	LATITUDE		LONGITUDE		DATUM		
	° ′	D. M. METERS	° ′	D. P. METERS			
Needle Rk. 1934	53 55	1041.0	166 31	1012.4	Dutch Harbor	Triangulation	9007 9008 8860 9007
Pinnacle Rk. 1934 *	53 54	529.0	166 28	116.8	"	"	" " 9007
** Beacon Lt. 1934	53 53	1756.1	166 30	1051.9	"	"	" " 9007
Ulakta Head Lt. 1934	53 55	1036.0	166 30	622.7	"	Topo.	" " 9007
Old Spit Head Lt. (Old Beacon Lt.)	53 53	1754.0	166 30	1048.0	"	"	" Not Charted Falls Within the Beacon Lt.
*N. Base2 1934	53 54	1539.2	166 30	372.3	"	Triangulation	" " 9007

*This is a very prominent rounding knoll 18 ft. high. See description of triangulation Station N. Base2 1934.

**This is the light that is now listed in the Light List - Pacific Coast.

Yellow Cross (See Des. Rept T-6429 - Landmarks) R

*Charted "Second Priest Rock" (See Geog. Names Stand)

A list of objects which are of sufficient prominence for use on the charts, together with a description of the same, must be furnished in a special report on this form, and a copy of such report must be attached by the Chief of Party to his descriptive report. The selection, determination, and description of these points are of primary importance.

The description of each object should be short, but such as will identify it; for example, standpipe, water tower, church spire, tank, tall stack, red chimney, radio mast, etc. Generally, flagstaffs and like objects are not sufficiently permanent to chart.

U. S. GOVERNMENT PRINTING OFFICE: 1930

GEOGRAPHIC NAMES
ALASKA

Date. March 12, 1935

Survey No. T 4888

Chart No. 8802 & 8860, 9007 & 9008

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. 28, 1935
Harlow Bacon

Status	Name on Survey	Name on Chart	New Names in local use	Names assigned by Field	Location
	Needle Rocks	Needle Rock C.P.			
	Ulakta Head	same			
	Mt. Ballyhoo		Mt. Ballyhoo		
	Pinnacle Rock	Pinnacle *			
	Amaknak Island	same			
	Dutch Harbor	"			
	Mt. Coxcomb R			Mt. Coxcomb	
	Iliuliuk Bay	same			
	Unalaska Island	"			
	Spithead	"			

*Charted: "Second Priest Rock" (Geog. Names Stand) Q

(M-136)

REVIEW OF TOPOGRAPHIC SURVEY No. 4888

Title (Par. 56) Dutch Harbor & Vicinity, S.W. Alaska

Chief of Party H.B. Campbell Surveyed by H.O. Fortin Inked by H.O. Fortin

Ship Discoverer Instructions dated April 13, 1934 Surveyed in June - July 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. 16e.)~~

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 size in this locality

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.

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Paragraph 9

T1950 (1867)

Topographic survey T1950 is mostly a reconnaisance survey on a small scale.

T4888 supersedes T1950 in part.

H5684 (1934)

(the western one) The correct position of one of the rocks awash off the Pinnacle is shown on H5684, the contemporary hydrographic survey.

T6429 (1935)

The two rocks awash off the Pinnacle are not in their correct position on the present T6429 survey. Their position should be taken from the adjoining contemporary survey. One of these rocks awash shown on T6429 is the same rock mentioned above under H5684 as being in its correct position. (the western one)

The two rocks on this sheet (T-4888) have been deleted. See note on page 4 of D.R. of H-5978
JGL.
July 25, 1936

T2236 (1896)

The present survey checks very nicely with T2236. Although it would appear that some of the rocks are not shown on T4888, the reef symbol included these rocks. The form lines on T4888 do not check the of T2236 exactly. (For a discussion of these see Descriptive Report of T4888). T4888 supersedes T2236 in part.

Chart 8860

The sunken rocks N.W. of Pinnacle are shown as a rock awash and a very shoal sounding on H5978 but are not shown on T4888.

The wreck at Lat. 53°-53'.2 Long. 166°30'.65 should be expunged from the chart. (See Descriptive Report for H5684).

Other rocks apparently separated from the shore line on the chart are within the reef line 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 distortion on sheet

14. ~~The descriptive report also contains additional information required in aero-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 DMs and DPs, 68.) None 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 having checked declinatoire

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 T6429 (1935) on the North
Joins T4889 (1934) on the South

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 ~~good~~ Fair. (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. Burk Jr. May 23, 1936.

Examined and approved:

E. W. Green — Chief, Section of Field Records

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

L. O. Colbert — Chief, Division of Charts

G. Rude — Chief, Division of Hyd. and Top.

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