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U. S. COAST & GEODETIC SURVEY  
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6828a &amp; b

AUG 26 1942

ACC. No. \_\_\_\_\_

Form 504 Rev. Dec. 1933	
DEPARTMENT OF COMMERCE U. S. COAST AND GEODETIC SURVEY R. S. PATTON, Director	
DESCRIPTIVE REPORT	
Topographic <del>Hydrographic</del>	Sheet No. 6828-a & b
State <u>Alaska</u>	
LOCALITY	
Sitka Sound	
Northern Sitka Sound	
S.E. side Kruzof Island	
1941	
CHIEF OF PARTY	
E. O. Heaton	

U. S. GOVERNMENT PRINTING OFFICE: 1934

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

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

REGISTER NO. T6828 a

State Alaska

General locality Sitka Sound

Locality S.E. side Kruzof Island ( )

1:10000 subplan

Scale 1:20000 Date of survey July, 1941

Vessel M. V. WESTDAHL

Chief of party E. O. Heaton

Surveyed by H. G. Conerly

Inked by H. G. Conerly

Heights in feet above HW ~~to ground~~ to tops of trees

Contour, Approximate contour, Form line interval 100 feet

Instructions dated June 10, 1941

Remarks: \_\_\_\_\_

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

TOPOGRAPHIC TITLE SHEET

34  
REG. NO.

T6828b

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

REGISTER NO. 6828 b

State Alaska

General locality Sitka Sound

Locality Northern North Sitka Sound

Scale 1:20000 Date of survey August, 19 41

Vessel Motor Vessel WESTDAHL

Chief of party E. O. Heaton

Surveyed by H. G. Conerly

Inked by H. G. Conerly

Heights in feet above HW to ground to tops of trees

Contour, Approximate contour, Form line interval        feet

Instructions dated June 10, 19 41

Remarks: Sheet for control



4-H

T6828 a  
T6828 b

DESCRIPTIVE REPORT  
Project HT-247  
Sheets T-6827 and T-6828-b  
Sitka Sound  
S. E. Alaska

MOTOR VESSEL WESTDAHL

E. O. Heaton,  
Commanding Officer.

PURPOSE:

Topographic survey and to furnish control for hydrography.

AUTHORITY:

Director's instructions dated June 10, 1941.

SHEET ~~6827~~ <sup>6828a</sup>

LIMITS:

<sup>6828a</sup>  
Sheet ~~6827~~ covers the S.E. end of Kruzof Island from St. Lazaria Island to Inner Point and vicinity of Vitskari Rocks.

SCALE:

1:20,000, and 1:10,000 (insert)

GENERAL STATEMENT:

The area on this sheet on Kruzof Island is heavily wooded to an elevation of 1000 feet. Above this the slopes are either bare lava or other volcanic material.

The shore line is almost all lava and lava reefs with a few small sand beaches. Trees are very close to the high water line on the eastern shore and within 100 meters of high water line on the south shore. The small island that FOAM 2 is on is lava with a layer of shells on the northern half of the area above high water. The rock on Vitskari Rock is sedimentary.

METHODS:

Standard topographic methods were used throughout. No long traverses were run. There was always a three point fix, or a resection available to check each planetable position.

COMPARISON WITH OTHER SURVEYS:

The shore line was carried to a junction with T-4390 and at a point on Long. 135° 40' the connection was very good so work was stopped at the point. Sheet T-2305 was more or less of a reconnaissance sheet and of much smaller scale so no comparison should be made with it on the shore line. Form lines in general agree with that survey. The shore line on T-2304 does not agree with that on this sheet at the vicinity of TROLL nor does the reef offshore.

The work on this sheet should be considered correct. The high water line may have changed the approximate 100 meters of the difference in some places. The land area from the high water line, north of TROLL, for a distance inland of approximately 100 meters is made up of old rotted driftwood and other vegetation forming a marshy area. Hydrography was done across what was shown on T-2304 as a reef and 10 to 13 fathoms of water was found.



VITSKARI ROCKS:

The topography in the vicinity of Vitskari Rocks was done on a scale of 1:10000. Station VITSKARI ROCK LIGHT was plotted on the 1:20000 projection and a 1:10000 projection was constructed around the station for the work in that vicinity. All work shown within the heavy lines is on a scale of 1:10000. The reason for doing it this way was so the one position of triangulation station VITSKARI ROCK LIGHT be used on both scales and all the work could be done on the same side of the sheet.

STATISTICS:

Miles of shore line - - - - - 14.8 stat. mi.

Area, square miles - - - - - 17.0 sq. mi.

SHEET 6828-b

SCALE:

1:20,000.

LIMITS:

Sitka Sound from Lat. 57° 05' North.

GENERAL STATEMENT:

The area consists of many small islands and with the exception of a few of the smaller islands, or large rocks in Hayward Straits they are all covered with trees.

PURPOSE:

The purpose of this survey was to furnish control for hydrography and control for photographs that are to be made later. Instructions were to rod in approximately 100 meters each side of each planetable set up. In some of the positions this was done but in some of the areas the old work was so much in error that a more detailed survey was accomplished. The islands on the west side of Hayward Strait were out of position so were located on this sheet. A detailed survey of the islands was completed. The shore line of Kruzof Island was not resurveyed.

93(2)  
Review

Some of the area around Little Gavanski Island was in error and needed to be completed.

Most of the shore line that was surveyed is fairly definite and should be ample control for the photographs which are to be made over this area.

STATISTICS:

Miles of shore line -b- - - - - 9.7 stat. mi.

Respectfully submitted,

*H. G. Conerly*  
H. G. Conerly  
Aid.

Approved and Forwarded,

*E. O. Heaton*  
E. O. Heaton,  
H. & G. Engr.,  
Comdg., WESTDAHL.



6 H

## Remarks

## Decisions

1		571356-58 U.S.G-B.
2		570355-58
3		"
4		" U.S.G-B.
5		"
6		"
7		" U.S.G-B.
8		" "
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## GEOGRAPHIC NAMES

Survey No. **T6828 a**

GEOGRAPHIC NAMES											
Survey No. T6828 a											
Name on Survey											7-H
	A,	B,	C,	D	E	F	G	H	K		
<u>Kruzof Island</u>											1
<u>Sitka Sound</u>											2
<u>Low Island</u>											3
<u>Shoals Point</u>											4
<u>Vitskari Island</u>											5
<u>Vitskari Rocks</u>											6
<u>Freds Creek</u>											7
<u>Inner Point</u>											8
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Names underlined in red approved  
by L. Heen on 10/27/42

M 234

Names underlined in red approved  
by L. Heen on 10/27/41

8H

Remarks

Decisions

1		570355-58
2		571352-580-2-4-B
3		571354
4		571355
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Survey No. **T6828 b**

Survey No.

T6828 b

[illegible]

# MEMORANDUM

## IMMEDIATE ATTENTION

104

SURVEY  
DESCRIPTIVE REPORT  
~~PHOTOGRAPH~~

~~No. T~~No. T **T6828** <sup>a</sup><sub>b</sub>

received **August 26, 1942**  
registered **September 24, 1942**  
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

R. W. Knox

*R. W. Knox*



11 H

DIVISION OF CHARTS

SURVEYS BRANCH

REVIEW OF TOPOGRAPHIC SURVEY

REGISTRY NO. 6828a&b

Field No. A & B

Southeastern Alaska, Northern Part of Sitka Sound  
and Southeast Side Kruzof Island

Surveyed July and August 1941; Scales 1:20,000

1:10,000

Instructions dated June 10, 1941

Plane Table Survey

Aluminum Mounted

Chief of Party - E. O. Heaton

Surveyed by - H. G. Conerly

Inked by - H. G. Conerly

Reviewed by - G. F. Jordan

Inspected by - H. R. Edmonston, January 15, 1943

1. Junctions with Contemporary Surveys

T-6828(a)

A satisfactory junction of shoreline is made with T-4390 (1928) on the southwest. A junction is made with T-2304 (1897) on the north, as instructed. The limits of shoreline and reef detail disagree as much as 100 meters, as noted in the descriptive report. In lieu of planimetric maps, adjustment of the junction should be made on T-2304 in charting. There ~~is~~ is no junction of form lines.

T-6828(b) furnishes control for hydrography and air photo surveys and shows some topographic detail. It joins T-6828(a) on the south and T-6829 (1941) on the southeast.

Air photos of this area have been taken but the compilations are not available for comparison.

2. Comparison with Prior Surveys

a. T-2148 (1893) 1:40,000

This prior survey is considered very poor in comparison with the present survey.

1. There are 100-meter differences in the shoreline in all directions. Prominent features like Shoals Point and certain streams agree fairly well but the intermediate areas are considered to have been poorly sketched.

11 A

2. A disagreement in the orientation of Vitskari Island and the location of the nearby rocks has already been noted in the review of H-6667 (1941).

b. T-2289 (1897) 1:40,000

All the shoreline on this prior survey within the area of T-6828(b) was taken from T-2304 (1897), with the exception of the entrance to Olga Strait. There is a large discrepancy in the junction of these two prior surveys in Hayward Strait, which is discussed under Par. 3(a).

c. T-2290 (1897) 1:40,000

The shoreline on this prior survey, within the limits of T-6828(a), was taken from T-2148 (1893) with the exception of a 1-1/4 mile gap between the junctions of T-2148 and T-2304. The shoreline and detail are considered to have been sketched in on T-2290 and are in poor agreement with the present survey.

d. T-2304 (1897) 1:20,000

T-6828(a) joins this prior survey but disagrees as much as 100 meters in the limits of shoreline and reef detail.

The rock awash at Lat. 57°07.25'; Long. 135°27.6', previously charted on 8281, is believed to have been transferred from H-2302 (1897) on which it was located by an erroneous detached position. This rock was disproved by H-6666 (1941).

*10 fm short now at the position*

e. T-2305 (1897) 1:60,000

The shoreline on this prior survey of Kruzof Island is considered to have been taken from T-2148 (1893).

The form lines on the southeast slope of Mt. Edgecumbe disagree slightly with the present survey, but there are as much as 1-mile disagreements on the headland on the east slope.

The present survey supersedes the above prior surveys. The area within T-6828(b) should be charted from T-2304 (1897) until air photo compilations are available, with the exception of some detail obtained on the present survey.



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3. Comparison with Chart 8281 (latest print 11-16-42)
- |      |   |   |          |
|------|---|---|----------|
| 8255 | " | " | 4-20-42) |
| 8256 | " | " | 3- 6-40) |

a. Topography

T-6828(b) disagrees with the charted islets and rocks in Hayward Strait, chart 8281. This is also noted on H-6667 (1941). This discrepancy is due to adjusting T-2304 (1897) to make junction with T-2289 (1897) in charting. Actually, T-2304 is in fair agreement with the present survey, the junction error being on T-2289.

b. Magnetic Meridian

Nine magnetic determinations were made of which seven agree 30' or less with the charted value. The value obtained at signal RAT on the shoreline east of Mt. Edgecumbe is 2° less. No mention is made in the descriptive report as to whether the declinatoire was checked at a station of known value.

4. Compliance with Instructions for the Project

Satisfactory.

5. Condition of Survey

Satisfactory.

6. Additional Field Work Recommended

No additional field work is necessary.

7. Superseded Surveys

T-2148 (1893) in part	T-2304 (1897) in part
T-2289 (1897) " "	T-2305 (1897) " "
T-2290 (1897) " "	

Examined and approved:

*Robert W. Hays*  
Chief, Surveys Branch

*Carl O. Heston*  
Chief, Section of Hydrography

*J. S. Dorden*  
Chief, Division of Charts

*G. H. Hude*  
Chief, Division of  
Coastal Surveys