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Form 504 Rev. April 1935 DEPARTMENT OF COMMERCE U. S. COAST AND GEODETIC SURVEY	
DESCRIPTIVE REPORT	
Topographic Hydrographic	Sheet No. T-6678
U. S. COAST & GEODETIC SURVEY LIBRARY AND ARCHIVES JUL 24 1940 Acc. No. _____	
State	S.E. Alaska
LOCALITY	
Glacier Bay	
Beartrack Cove To Sandy Cove	
193 9	
CHIEF OF PARTY <i>Benjamin H. Boggs</i> Benjamin H. Boggs	

U. S. GOVERNMENT PRINTING OFFICE

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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. 1939

REGISTER NO. T-6678

T6678

State S.E. Alaska

General locality Glacier Bay

Locality East side, Beartrack Cove to Sandy Cove

Scale 1-20,000 Date of survey Aug. 9-Sept. 4, 1939

Vessel Motor Vessel WESTDAHL

Chief of party Benjamin H. Rigg

Surveyed by George A. Nelson

Inked by G. A. Nelson

Heights in feet above MHW to ground ~~#####~~

~~#####~~ Form line interval 100 feet

Instructions dated Mar. 10, 1938 & April 19, 1939, 19

Remarks: Form lines to be determined on separate sheet

DESCRIPTIVE REPORT

to accompany

TOPOGRAPHIC SHEET T-6678

M.V.WESTDAHL

Season of 1939

Benjamin H. Rigg, Commdg.

AUTHORITY

This survey was made under the Director's instructions dated March 10, 1938 and supplemental instructions dated April 19, 1939

LOCALITY

This sheet covers the area on the east side of Glacier Bay, S.E. Alaska, from and including Beartrack Cove to the southern extremity of Sandy Cove. It includes North and South Marble Islands and the islands and reefs lying between them and the east shore.

GENERAL DESCRIPTION OF COAST

The shoreline is precipitous with mountains rising directly from the beach. This mountain mass is cut in several places by fairly large valleys containing sizeable streams. The slopes are, in general, thickly wooded to an elevation of about 1500 ft., principally with conifers. The valleys contain conifers and deciduous trees in about equal numbers. The shoreline is thickly fringed with alder.

At the northern extremity of the sheet just south of Sandy Cove, a prominent bold cliff projects to an elevation of 1625 feet. Parts of the cliff are vertical for distances of 200 to 300 feet.

Beartrack River, at the head of Beartrack Cove, is a glacial stream too deep and swift to wade at its mouth. The other stream at the head of Beartrack Cove, at its northeast extremity, is clear and much the smaller.

It is said to extend only a short distance, a mile or so, and to have its origin in a series of ponds and potholes. John Johnson, a resident of many years standing in the Bay is authority for this statement. This makes the International Boundary Survey Map, Sheet No. 10, of this area in error as it shows this latter stream to be much the larger of the two. Beartrack River bends sharply to the north about two miles from its mouth and probably occupies the valley shown as being occupied by the second mentioned stream on the International Boundary Survey Map.

The stream three miles north of Beartrack Cove drains a large steep-walled valley and gives evidence of a glacial origin.

The stream at the northern extremity of the cove at the northern extremity of the sheet (MAYNARD COVE) is large and also of glacial origin. The eastern stream at the head of this cove is clear and drains the valley to the eastward.

North and South Marble Islands are solid marble weathered to a slate color except near the top, and are sparsely wooded. The tops are bare and the sides are steep.

The two islands lying east of the Marbles are low, thickly wooded, and are composed of coarse gravel with scattered boulders of moderate size. They have extensive low water areas surrounding them and a large reef to the southward. They are of the same glacial moraine type as the Beardslee Islands to the southward and the Sandy Islands to the northward.

The group of reefs in latitude $58^{\circ}36'$, longitude $135^{\circ}59'$ are of coarse gravel with scattered boulders and may be considered the northern extremity of the Beardslee group of islands and reefs.

LANDMARKS

There are none of prominence. ✓

METHOD OF SURVEY

Standard plane table methods were used thruout. There were no traverses; intersection, resection, and three point fixes being used entirely. ^{Lat. $58^{\circ}39'$, long. $135^{\circ}56'$} Station SPUD is a marked topographic station. It was located by three cuts from triangulation stations intersecting perfectly. All low water line shown was determined by the topographer at stages of the tide within three feet of MLLW, allowances being made for stages other than MLLW. The low water line is not complete as opportunities for determining it were insufficient. The missing parts may be obtained when the hydrography is done in this area. ✓

All drainage shown above MHW was obtained from the three-lens aerial photographs furnished by the office. They were not otherwise used except for comparative purposes. ✓

ELEVATIONS

These were obtained by vertical angles and are to the ground referred to MHW. A uniform deduction of 50 feet for height of trees was made on all wooded areas. This introduces a possible error of 25 feet as the height of trees varies with soil conditions and other factors. A few scattered elevations were obtained along shore but no effort was made to obtain form lines as the instructions call for a separate form line sheet on a scale of 1-80,000 ✓

OFFLYING DANGERS

As shown and noted. The heights to which the various reefs and rocks bare was obtained by the topographer by noting the time they were

awash or nearly so, and referring to the Willoughby Island tide records. ✓

DECLINATOIRE OBSERVATIONS

Declinatoire #209 was used exclusively. This instrument was ✓
standardized at Lincoln Park, Seattle, November 2, 1939 and the following
results obtained:

Mark-Alki Point L.H.	39°-44'
	39-40
	39-30
Av.	39-38 ✓
Azimuth of mark	-17-23 ✓
Declinatoire variation	22-15 ✓
Variation from chart (Seattle)	23-15
Declinatoire index correction	+1°-00' ✓

Station	Date	Scaled value	Corr. value
Back 1939	Aug. 9, 1939	28°-44'	29°-44' ✓
Bear 1939	Aug. 9, 1939	28-40	29-40
Sandy 1939	Aug. 28, 1939	29-20	30-20

Charted value is 30°15'

LIST OF OFFLYING SIGNALS

Name	Lat.	Long.	Elev. (ft. above MHW)
Cue	58°-39'	135°-59'	1 ✓
Foe	58-36	135-50	15
Ure	58-39	135-56	12

JUNCTIONS WITH OTHER SHEETS

This sheet joins Reg. T-6677⁽¹⁹³⁸⁻³⁹⁾ on the south and ~~unsurveyed area~~^{T-6755 (1940)} ✓
on the north.

STATISTICS

Shoreline, statute miles, ----- 24.0 ✓
Area, square statute miles, ----- 15.0

SUGGESTED GEOGRAPHIC NAMES

✓ Beartrack River is suggested for the large glacial stream at the head of Beartrack Cove. It is a larger stream than the Bartlett River.

✓ Beartrack Island suggested for the small bold island near the northern shore of Beartrack Cove. The cove north of the island is an excellent anchorage for small boats.

✓ Topeka Islands is suggested for the two flat islands lying between the Marble Islands and the mainland and Topeka Reef for the reef lying just south of them, after the S.S. TOPEKA which visited Glacier Bay in 1892.

(U.S. Geological Survey, 16th Annual Report, 1894-95)

✓ Westdahl River is suggested for the fairly large stream draining the valley on the mainland two and a half miles southeast of the Topeka Islands after the U.S. Coast & Geodetic Survey Vessel WESTDAHL.

✓ Maynard Cove is suggested for the cove lying two and a half miles north-northeast of the Topeka Islands after Washburn Maynard, Commanding the U.S.S. PINTA which visited Glacier Bay in 1892.

(U.S. Geological Survey, 16th Annual Report, 1894-95)

Respectfully submitted,

George A. Nelson
George A. Nelson
Jr. H. & G. Engr.
Topographer

Approved and forwarded,

Benjamin H. Rigg
Benjamin H. Rigg
Chief of Party

Remarks

Decisions

1		585355 USG-B
2	Do not ink pending U.S.G.B. decision	"
3	"	"
4		580355 USG-B
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GEOGRAPHIC NAMES

Survey No.

T6678

GEOGRAPHIC NAMES		Survey No. T6678									
Name on Survey	<div>On Chart No. 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</div>										
	A.	B.	C.	D.	E.	F.	G.	H.	K.		
<u>Beartrack Cove</u>											1
<u>Beartrack Island</u>											2
<u>Beartrack River</u>											3
<u>Glacier Bay</u>											4
<u>Maynard Cove</u>											5
<u>North Marble Island</u>											6
<u>Sandy Cove</u>											7
<u>South Marble Island</u>											8
<u>Topeka Islands</u>											9
<u>Topeka Reef</u>											10
<u>Westdahl River</u>											11
	Names underlined in red approved										12
	by L. H. Eck on 8/12/40										13
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MEMORANDUM

IMMEDIATE ATTENTION

SURVEY
DESCRIPTIVE REPORT
PHOTOSTAT OF

~~No. 44~~

No. T **T6678**

received July 23, 1940
registered July 24, 1940
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			
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25	✓	HBL	Pages 1 and 2
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RETURN TO

82	T. B. Reed
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✓ JBR

DIVISION OF CHARTS

Surveys Section

REVIEW OF TOPOGRAPHIC SURVEY

REGISTER NO. 6678

Field No. B 1939

S. E. Alaska; Glacier Bay; Beartrack Cove to Sandy Cove
Surveyed August - September 1939, Scale 1:20,000
Instructions dated March 10, 1938; April 19, 1939 (WESTDAHL)

Plane Table Survey

Aluminum Mounted

Chief of Party - B. H. Riggs
Surveyed and inked by - G. A. Nelson
Reviewed by - J. A. McCormick, November 8, 1941
Inspected by - H. R. Edmonston

1. Adjoining Surveys

Excellent junctions were effected with T-6677 (1938-39) on the south and with T-6755 (1940) on the north.

2. Previous Surveys

T-2852 (1907), 1:127,000

Shoreline agreement is mediocre. Methods used on the old survey were apparently much less accurate than those of the present survey. Form lines also are in disagreement.

3. Comparison with Chart 8306 (Print of Sept. 30, 1940)

Topography charted in this area is charted mostly from the survey discussed in the previous paragraph but with some additions from chart letters. None of the information now charted should be retained.

4. General Comment

None.

5. Compliance with Project Instructions

Excellent.

6. Superseded Surveys

T-2852 in part.

Examined and approved:

Robert W. Knox

Chief, Surveys Section

J. B. Borden

Chief, Division of Charts

L. P. Reynold

Chief, Section of Hydrography.

G. H. Hude

Chief, Division of
Coastal Surveys