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 FEB 10 1931 State: Alaska DESCRIPTIVE REPORT Topographic Sheet No. 4565 Hydrographic | LOCALITY Behm Canal, S.E. Alaska Survey Pt. to Escape Pt. 1930_ CHIEF OF PARTY E.W. Eichelberg

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.

StateALASKA_
General locality BEHM CANAL . S. E. ALASKA
Locality FAST SIDE, NORTHERN ENTRANCE. Survey Pt. to Escape Pt
Scale 1:20,000 Date of survey April - May , 1930
Vessel EXPLORER
Chief of Party E. W. Eickelberg
Surveyed by Philip C. Doran
Inked by Philip C. Doran
Heights in feet above H.W. to ground ************************************
for the interval 100 feet
Instructions dated March 7th , 1930
Remarks:

DESCRIPTIVE REPORT

TO ACCOMPANY TOPOGRAPHIC SHEET "B"

BEFM CANAL - S. E. ALASKA.

AUTHORITY:

Work was done under Director's instructions, dated March 7th, 1930.

LIMITS:

The shore line extends along the east side of Behm Canal from triangulation station SURVEY, 1930, Latitude 55° 28.1', Longitude 131° 49.8', northward along Revillagizedo Island to triangulation station CLOVER, 1930, Latitude 55° 31.5', Longitude 131° 42.5'. The islands which from the west side of Clover Passage - Betton, the Pup, Clover, Hump and Tatoosh and smaller unnamed islands in south end of Clover Passage, are included in the sheet.

At the south end, a junction is made with topographic sheet 3858 at station SURVEY. A traverse for locating signals was run from station SURVEY to triangulation station GIN, latitude 55° 26.9°, Longitude 131° 49.8°, and beyond for 3/4 mile.

A junction with topographic sheet "C" is made at CLOVER. Another junction with the same sheet is made at triangulation station LOR, 1930, Latitude 55° 36.4', Longitude 131° 39.9'. The shore line then extends northward to triangulation station NOSE, 1930, Latitude 55° 39.7', Longitude 131° 42.5'. The shore line shown on sheet in pencil is a reduction from 10,000 scale sheet "C".

GENERAL DESCRIPTION:

The greater part of the shore line shown on this sheet is steep and rocky. The high point on the west side of Betton Island dominates that part of the territory. Light colored cliff on Tatoosh Island is noticable from the west. A lumbered off patch shows up brown against the green background on the north end of Betton Island. The peaks along the east side of Clover Passage rise to heights up to 2600 feet. All the territory is covered with heavy evergreen timber.

LANDMARKS:

A light yellowish cliff about 130 feet high located on the west side of Tatoosh Island is visible from the west, and could be of use as a landmark for ships approaching the canal. Cliff is in Latitude 55° 31', 91 meters, Longitude 131° 50', 799 meters.

CHARACTER OF CONTROL USED:

The control for this survey was based on the scheme of triangulation executed in 1929 by Lieutenant J. M. Smook, supplemented with additional triangulation stations to comply with the requirements for control as stated in the Manual.

The control in Clover Passage was by means of plane table triangulation between triangulation station PUP 1930, and SURVEY 1930 on the south, to triangulation station CLOVER 1930 on the north end.

All traverses run were within the limits prescribed in the Manual and were adjusted as described therein.

Standard practice was followed through-out the entire sheet.

LOCATION OF OFF-LYING FEATURES:

Reefs and rocks were located by direct rod readings, except the two rocks awash at 1 foot and 1-1/2 feet minus tide between Back and Betton Islands. These rocks were located by directional cuts.

FORM LINE VERIFICATION:

Form lines were not checked by off shore observations, but were checked against the Geological Survey Map of Revillagegido Island on the scale of 1:80,000. Considering that this topography was based on the present charts of this vicinity, the new form lines checked the older topography. All elevations are to the ground above high water. The heights of the trees were estimated between 40 and 80 feet, depending on the general elevation of the tree in question.

MAGNETIC OBSERVATIONS:

Magnetic observations were made at triangulation station PUP, TATOOSH2, CLOVER and PUG2. Comparison with declinometer No. 12 was made at station TATOOSH2 and corrections indicated on sheet. Declinatoire used was number 2487 (makers number).

STATISTICS:

Statute miles of shore line - high water Statute miles of shore line - low water	
Area Form Lines - square miles	40 75

Planetable Positions

Object	Lat.	D.M.	Long.	D.P.	Height	
White Barrel Beacon	55 ⁰ 28 '	1078	131°47'	915	16 ft.	
Red Buoy No. 10, Pond Reef	55°26 *	246	131 ⁰ 48	735		

Respectfully submitted,

Philip C. Doran, Hydro. & Geod. Engineer.

Approved and Forwarded:

E. W. Eickelberg, Commanding Officer,

U.S.C. & G.S.S. EXPLORER.

STATISTICS.

Sheet Field Letter "B"

Statute miles of shore line, high water	35.3
Statute miles of shore line, low water	10.6*
Areaform lines - square statute miles	40
Number of elevations	75
Number of permanent land marks for charts located by Planetable	1

^{*} Where no low water line is shown the difference between the high and low is to small to show on chart.

APPROVAL SHEET,

Topographic Sheet "B"

This sheet has been examined by me and is approved.

The contouring for this sheet was made to include the area of Sheet "C" (1:10,000) because more area could be covered than on sheet "C" and better locations obtained.

The shore line in pencil was reduced and transferred from Sheet "C".

E. W. Eickelberg,

Commanding Officer,

U.S.C. & G.S.S. EXPLORER.

4565

DIVISION OF CHARTS, FILE NO.__

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

LANDMARKS FOR CHARTS

	Seattle, Washington								
						Deden	ber 20		, 19 3 6
DIRECTOR, U. S. COAST AND GI	ODET	ic St	rvey:				-		•
The following determined description given below, and s	obje hould	cts ar I be c	e prominer charted.	nt, can	be			ed from se	award from the
							9001		Thief of Party.
DESCRIPTION	Latitude				Long	itude	D-+	METHOD OF DETER-	CHARTS AFFECTED
		·	D. M. meters		,1	D. P. Meters	Datum	MINATION	
							***	Angle	03.00
Light Yellow Cliff about 130 feet high.	55	31_	91	131	<u>50</u>	799	N.A.	from sextant fix.	8102
100 1000 111811									
White Barrel Beacon	55	28	1078	131	47	915	N.A.	Plane-	8102
16 feet high	30	20	1010	101					
	†			 		****	*** *	Plane- table	8102
Red Buoy No. 10	55	26	246	131	48	735	N.A.	CAULO	
Pond Reef							•	ļ	
						-			
				,					
				ļ					
			-	ļ					
						}			
							_		
•	ļ.—		<u> </u>		_				
		•							
	<u> </u>								
	1		<u></u>	<u> </u>				<u> </u>	

chart.

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