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Treasury Department,  
U. S. COAST AND GEODETIC SURVEY.

*Henry S. Pritchett*  
Superintendent.

State: *Alaska*

DESCRIPTIVE REPORT.

*Hydrographic Sheet No. 2503.*

LOCALITY:

*Prince William Sound*  
*Pt. Johnston to Pt. Gravina,*  
*showing extent of Middle*  
*Ground Shoal and Newbome Id. Cut Off.*

1900

CHIEF OF PARTY:

*Homer P. Ritter*

2503

101

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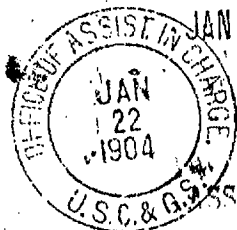
*1/23/04*

COAST AND GEODETIC SURVEY Department of Commerce and Labor

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COAST AND GEODETIC SURVEY



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*Washington, D.C.*

*Jan. 22, 1904*

*Descriptive Report  
to accompany  
Hydrographic Sheet  
No. 2503.*

*Homer P. Ritter  
Assistant*

Title:

Treasury Department  
U.S. Coast and Geodetic Survey  
Henry J. Pritchett, Superintendent  
Hydrography

Pt. Johnstone to Pt. Gravina showing  
extent of Middle Ground Shoal and  
Hawkins Island Cut off.

Prince William Sound  
Alaska

Party of Homer P. Ritter, Assistant  
June 25 to 27 - Aug 1 to 11 - Sept 3 to 14 - 1900

Scale  $\frac{1}{40000}$

Observers:

Homer P. Ritter, Assistant  
H.C. Denson, Aid. - Dr. H.M.W. Edmonds  
H. Bernhardt, Recorder

Chas. Eklund, Leadsman - Chas. Fick, Coxswain

Tide Observers

R.E. Carson - John Labranz - John Nelson

Register no. 2503

### Statistics

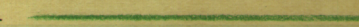
Date 1900	Letter	Number of.			Miles Geog.	Vessel
		Vol.	Angles	Soundings		
June 25	H	1	21	135	9.0	Str. Taku
" 26	I	1	1	3	0.1	"
" 27	J	1	19	126	8.7	"
Aug. 1	P	2	73	672	14.8	Gasoline Launch
" 4	Q	2	40	228	14.6	"
" 9	R	2+3	108	1148	30.1	"
" 10	S	3	78	941	21.9	"
" 11	T	3	17	28	12.2	"
Sept. 3	U	3	19	170	22.7	"
" 5	V	4	51	402	19.3	"
" 7	W	4	57	540	16.0	"
" 13	X	4	32	46	22.1	Str. Taku.
" 14	Y	4	14	25	11.6	"
<b>Total</b>		13	4	530	4464	203.1

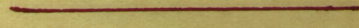
Notes:


The soundings are expressed in feet and show the depth at the plane of reference (Harmonic Tide Plane for this region)

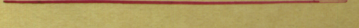
This plane is 8.2 feet below Mean Sea Level - 3.5 feet below <sup>mean</sup> Mean Low Water - 12.9 feet below on <sup>the</sup> Camp Benson <sup>side</sup> Staff. <sup>The</sup> plane of reference reads 9.0 feet. Mean rise and fall of tides = 9.4 feet.

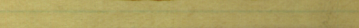
For description of Tide Staffs - B.M.s - reduction of soundings etc, see Tide and Sounding records, Prince William Sound, 1900.


The 6 foot curve is shown thus. 

" 12 " " " " " 

" 18 " " " " " 

" 60 " " " " " 

" 120 " " " " " 

" 300 " " " " " 

Plotted by J. J. Watkins  
 Verified by F. C. Donn.

The hydrography shown on Hydrographic Sheet No. 2503 embraces Hawkins Island Cut off and the southern side of the entrance to Cordova Bay from Pt. Johnstone on the west to Pt. Makaka on the east; also a number of sounding lines extending from here to Knowles Head, Red Head and Pt. Gravina on the opposite of the bay.

Hyd. sheets no. 2501 and 2438 join the sheet on the east.

Hawkins Island Cut off.

This waterway separates Hinchinbrook Island from Hawkins Island, and is about 10 nautical miles long. From its eastern end where it connects with the southern extremity of Orca Inlet it extends in a westerly direction for about 6 miles with a uniform width of about 2 miles; it then takes a sharp turn to the northward

and narrowing up for a short distance and farther on widening out again connects with that part of Prince William Sound which forms the approach to Cordova Bay. In the narrow part of the Cut off the width is about 1/2 a mile; at its western extremity 2 miles.

Eastern shore of Cut off.

From Makaka Pt. to where the Cut off makes a sharp turn to the eastward is about 4 miles. Along the shore in the northern half of this stretch the land is comparatively low, gradually rising to the south and southeastward. Large areas of tundra meadows with occasional patches of coniferous trees are the conspicuous features of the landscape.

Along the shore a number of lagoons, usually fronted by a narrow sand or gravel barrier having a narrow opening, indent the land.

In the southern half of this stretch the high land of the island approaches nearer to the shore and in a number

of places ends in rocky bluffs.

Here the land is more densely wooded than it is farther to the northward. A number of small islands and rocky reefs are found near shore:

Northern shore of Cutoff:

Along the northern side of the eastern part of the Cutoff the land contiguous to the shore is high, bold, rocky and densely wooded. The shore in general is rocky. The beach between the high and low water line is thickly strewn with boulders, which apparently have broken off and rolled down the steep mountain side.

Many of the boulders are of large size. Below the mean high water line the beach is thickly covered with kelp. Here and there a shingle beach is found. A number of small streams come down the mountain side.

Southern and western shore of Cutoff:

The land contiguous to the

Shore along the eastern half of the southern shore of the Cutoff terminates in comparatively low rocky bluffs densely wooded close to shore.

The beach along the shore is similar to that along the northern shore.

In the western half of this stretch and along the western shore of the Cutoff the land close to shore is low, gradually rising towards the interior of the island.

Here also large areas of tundra meadows with occasional patches of coniferous trees are found.

Along the shore a number of shallow coves and numerous lagoons, with the usual sand or gravel barriers and narrow openings, indent the land. In these lagoons wild geese and ducks abound in large numbers.

Hawkins Island Cutoff is navigable only for vessels of light draught and as will be seen by an inspection of the sheet a thorough local



Knowledge is required for navigating this waterway.

With the exception of the Coast Survey Str. Taku and several of the salmon cannery light draught steamers, <sup>no vessels are known to</sup> looking for timber or fish, have ever been here.

In the eastern end of the Cut off extensive sand and mud flats, which are bare at low water and barely covered at high stages, are found.

In the western part of the Cut off several isolated rocks in midstream and strong tidal currents offer an additional menace to navigation.

In front of the western end of the Cutoff is an extensive shoal known as "Middle Ground Shoal".

This shoal extends from Makaka Point on the east in a westerly direction towards Pt. Johnstone and in a northerly direction towards Gravina Bay. The development of this shoal, which is shown on the sheet, is of considerable value to

Ships bound for Orca and Odiak.

Northern Shore of Hinchinbrook Island  
from Pt. Johnstone to Hawkins Island  
Cutoff.

In this stretch of about 8 miles the land close to shore is low.

A short distance back from shore it rises rapidly, attaining heights of over 1400 feet. Tundra meadows and areas of coniferous trees constitute the flora. Several coves or small bays and a number of lagoons extend inland from the shore. The beach in a considerable extent of this stretch is composed of shingle and boulders. At a number of places, <sup>the</sup> low rocky bluffs are fronted by rocky, keep covered beaches. Two of the indenting bays, situated about midway between Pt. Johnstone and the Cutoff cover an area of several square miles. The western one of the two extends inland in a southwesterly direction for nearly two miles. The eastern one

somewhat wider, extends inland in a more southerly direction for about  $1\frac{1}{2}$  miles. A large part of both of these bays goes dry at low water. There are also a number of rocky reefs and gravel bars in these bays.

The eastern extremity of the eastern one of the two bays is separated from the waters of Cordova Bay by a gravel barrier 25 to 50 yards wide and about  $\frac{1}{2}$  a mile long. This barrier is frequently submerged at the western end. The party, when surveying in this vicinity, camped at the eastern end of this barrier.

During stormy weather (from the north) the Str. Taku anchored in the bay inside the barrier. At other times good anchorage was found a few hundred yards from shore outside of the barrier.

Homor O. Ritter

Asst. C. G. Survey