

2807

Diag. Cht. No. 8551-1

83  
SHA  
2807  
1906

Department of Commerce and Labor

COAST AND GEODETIC SURVEY

*O. H. Tittmann*  
Superintendent.

State *Alaska*

U. S. C. & G. SURVEY,  
LIBRARY AND ARCHIVES  
MAR 26 1907  
Acc. No.

DESCRIPTIVE REPORT.

*Nydc* Sheet No. *2807*

LOCALITY:

*Prince William*  
*Sound. Reconnois-*  
*sance*

1906

CHIEF OF PARTY:

*W. B. Hopkins*

2807

RECEIVED  
COAST AND  
GEODETIC SURVEY

2807

U. S. C. & G. SURVEY,  
LIBRARY AND ARCHIVES,  
MAR 26 1907  
Acc. No.

MAR 26 9 57 AM 1907

FILE:  
REFERRED:  
ASSISTANT IN CHARGE

Descriptive Report  
to accompany Hydrographic Sheet No. 2807  
Reconnaissance of Prince William Sound, Alaska.  
1905

The information given on this sheet is of a preliminary nature, having been derived from sketches made from boats while running along shore and from ship positions located by tangents to headlands, by angles upon mountain peaks, and other approximate methods, in advance of a regular triangulation. The information given is probably sufficient for the present needs of navigation but is not exhaustive and this should not be considered in the light of a finished survey.

Throughout the area shown, the land masses are generally densely wooded to an elevation of several hundred feet, while the higher summits are bare of trees. The lower hills and most of the smaller islands are wooded to their summits. Among the most densely forested is Naked Island, the name of which is a decided misnomer, as not a bare spot is to be seen upon the island.

North and west of Prince William Sound the mountains rise to great elevations, probably to ten or fifteen thousand feet, and carry large snow fields and many glaciers. Though the Shoup Glacier, on the north side of the Valdez Arm, and the Valdez Glacier, back of the town, are conspicuous features of the trip to Valdez, the principal glacier of the eastern part of Prince William Sound is that called the Columbia, which terminates in a wall of ice at the head of the bay north of the eastern part of Glacier Island.

During the summer months this glacier discharges numerous small bergs, most of which seem to pass out to the westward of Glacier Island, though a good many also escape to the eastward and sometimes get far enough to the eastward to be a source of possible danger to passing vessels, though this danger is minimized by the shortness of the nights during the summer in this high latitude.

Many of the pieces of floating ice which were seen in the sound in the summer of 1905 were covered with dirt and stones and as seen from a distance much resembled reefs showing a little above the surface. I am inclined to think that some such dirt covered bergs are responsible for the very circumstantial stories of a dangerous reef in the fairway of Prince William Sound, between Glacier and Bligh Islands, which were told us by the pilots of some of the mail steamers plying in those waters.

The range of mountains which extends throughout almost the whole length of Montague Island is of more moderate elevation than the lofty peaks of the Chugach Range but holds its snowy covering until late in the season and has many small glaciers in the valleys on its northwestern slope. None of these, however, reaches to the sea or nearly to sea level.

The bare summits of the higher hills are usually composed of bare rock, while those of more moderate height are frequently grass covered.

There are few settlements in this region, but as one of the principal avenues to the interior of Alaska Prince William Sound is rapidly developing an extensive commerce, deserving of some aids to navigation, which are now non-existent.

Valdez, which is outside of the limits of this sheet, is the most important settlement on the shores of Prince William Sound. Ellamar, on the eastern side of the sound near the entrance to the Valdez Arm, is an important point of call for the steamers on account of its valuable copper mine, from which large quantities of ore are shipped to the smelter at Tacoma, Washington.

Another copper mine of more recent development is located near the northern end of Latouche Island, where a large body of very high grade ore has already been exposed. Other copper deposits occur in Boulder and Landlocked Bays.

Projects for building railroads to the rich copper deposits of the Copper River country have been undertaken at Valdez and at Cordova Bay, the latter in the southeastern part of the sound, and have caused a great increase in the carrying trade to these points.

The waters of Prince William Sound are, in general, deep and free from hidden dangers, though at some points attention to the navigation is required. The approaches to the wharf at Ellamar afford perhaps the most troublesome feature of the usual steamer route through the sound and more especially when the weather is thick or stormy. When running in for Ellamar, caution is needed in approaching the reef off Fox and Bligh Islands, especially when intending to pass between the reef and Fox Island, as steamers sometimes do.

An extensive reef, some points of which are above water, extends from Green Island toward Seal Island and shoals extend for moderate distances from Montague Point and some other headlands. The passage between Montague and Green Islands should be carefully avoided until it has been thoroughly surveyed, as rocks are known to exist there.

With ordinary care little difficulty should be experienced in clear weather but in thick weather a good degree of caution is necessary, as the currents are strong in some places and the lead is ordinarily of little service until close to the land, on account of the great depth of water in the fairway. As a rule, if running slowly in a fog, the shore may be approached with safety closely enough to see it or perhaps to get an echo of the steam whistle from it and when near the shore the lead will generally give a warning of too close approach.

There are quite a number of places suitable for anchoring in different parts of the sound and several of these were used by the Patterson. In pleasant weather, anchorage may be made in almost any desired place in the open sound provided the depth of water does not prove too great and at such anchorages good fishing will usually be found. In bad weather it would be preferable to have better shelter and if not too much pressed for time an anchorage can generally be selected to suit the direction of the wind.

In addition to other temporary stopping places, the Patterson anchored in Snug Corner Cove, on the southern side of Fidalgo Bay; in the deep cove which indents the northern side of Naked Island and in the corresponding cove on the southern side, which almost meets the former; in the small cove on the eastern side of the last named, near its entrance; in the cove on the west side of Naked Island, next north of the signal "Tuft"; in Rocky Bay, at the north end of Montague Island; in Discovery Bay and Horn Cove, on the eastern side of Knight Island; in the bight near the signal "Verde", on the west side of Montague Island; in Hanning Bay; in Macleod Bay; in the open bight between Macleod Bay and Cape Cleare; off the wharf at Latouche copper mine; and in the narrow cove lying behind Point Elrington. With the exception of Hanning Bay, the anchorages on the Montague Island side were not highly esteemed. The Patterson did not enter either Stockdale Bay or Chalmers Harbor. The vicinity of these bays is obstructed by reefs and their use is not recommended in advance of a survey.

Discovery Bay is a much better anchorage than Horn Cove.

It will appear from the map that some of the anchorages named are open to winds from certain directions, but it was usually found that even when the wind blew directly into the mouth of a cove the sea was very moderate at the anchorage. When in the vicinity of Naked Island, a steamer can find shelter from any wind in one or another of the numerous coves which indent the shores of that island.

There are no points on this sheet at which ship supplies can be obtained. Provisions and some classes of ship stores are generally to be found in moderate quantities at the towns of Valdez, at the head of the sound, and Seward, on Resurrection Bay. It is sometimes possible to purchase coal in limited quantities at Valdez and at Orca, near the head of Cordova Bay, but this cannot be depended upon. Kerosene, in five gallon tins, is generally to be gotten at the towns. At Valdez and Seward are wharves with water laid on. At Valdez a charge is usually made for the use of the wharf and for water taken. At Seward the vessels of the Survey have been accommodated without charge when the wharf was not needed for commercial steamers.

5  
Firewood may be obtained from the shore if needed and there are many points at which fresh water of good quality may be obtained from streams, especially early in the season, while there is still plenty of snow on the hills.

Discovery Bay and Horn Cove are especially convenient watering places.

The general aspect of the outer coast of this region is mountainous and until late in the season the summits are covered with snow while the lower slopes are clothed with dark forests of spruce. The ocean shores are generally formed of abrupt broken cliffs, with numerous rocks fringing the shore and having the appearance of having fallen from the cliffs. There is almost always a heavy swell running on this coast and the sea breaks violently on the rocky shores. The general effect, as seen from the offing, is extremely forbidding and one hesitates to approach the coast closely until well assured of the depth of water and of the character of the bottom. In all of this region, the greatest danger is from unknown pinnacle rocks, which are liable to exist anywhere and which are very difficult to detect in the course of the survey, unless discovered by some accident.

The vessels which regularly traverse these waters usually come from Seattle by way of Cape St. Elias and enter Prince William Sound by the Hinchinbrook Channel, passing between Cape Hinchinbrook and the Seal Rocks. They proceed to Valdez, frequently stopping at Orca, Cordova Bay, or Ellamar on the way, and from Valdez go to Seward through the passages west of Montague Island. It is customary to pass between Smith and Seal Islands and after clearing the southern end of Knight Island to turn into the Latouche Passage, sometimes stopping at the copper mine wharf. From Latouche some steamers continue through the Latouche Passage, between Latouche and Danger Islands on the left and Elrington Island on the right, while others turn into the Prince of Wales Passage and reach the sea through the broad estuary between Point Elrington and Cape Puget. I have never known a commercial steamer to use the main passage through Montague Strait though that is much the best of the lot, though a trifle longer, and was usually taken by the Patterson.

*W. C. Hodgkins*