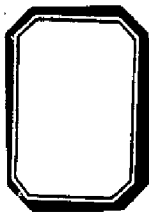


3694

U. S. G. S.
L. & A.
D. S. 26
Acc. No.



Form 504
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

State: _____

11-5813

DESCRIPTIVE REPORT.

Top. Sheet No. 3694

LOCALITY:

1917

CHIEF OF PARTY:

3694

DESCRIPTIVE REPORT

Topographic Sheet No.

Limits

This sheet details the topography of that part of the west coast of Chichagoff Island from the northerly limit of Portlock Harbor, thru Dry Pass, and north to Cautious Passage and the south end of Bertha Bay. There is also included a sketch of Pinta Bay, the north west coast of Hill Island, and the shore line from Bertha Bay to Ilin Bay.

General character

The very irregular coast is characterized mainly by bold cliffs and rocky beaches with many small islands and rocks off shore. On account of shelving rocks small boat landing is very difficult in any except very calm weather. The immediate shore line and the larger islands are well wooded, but in the rolling country back from the coast there are many stretches of open marsh with lakes or tidal lagoons in the depressions. Around Pinta Bay (Houlding Hbr.) however steep hills and mountains rise abruptly from the water. The timber along the coast is small and composed of spruce, hemlock, and scrub cedar. Around Dry Pass and Pinta Bay, there is a much better stand of timber and cedar of good growth is more prevalent. B. 12.

Kelp on shoals

The shoals along the coast are well marked by kelp in the late summer, but this is carried away by winter storms and there is very little showing in the spring.

Previous survey

A survey of Mirror Harbor and approaches was made in 1916 by H. P. Crowther, Deputy Surveyor of Alaska, for the location of the Juneau Sea Level Copper Mining Co's nickel mine and for the application for power permits. The accompanying blue prints of his work were obtained from the mining company. This work was done by transit and stadia and the control evidently included Mirror Hbr., and the entrance thereto, and Davison Bay. His shore line in this vicinity is very good, tho lacking in detail and the conventional signs for rocks awash, sunken rocks, and rocky islets were used quite interchangeably. The off shore islands and the shore line to the north and south were sketched but give a general idea of the country. His location of lakes and streams was approved by men who hunted over the same ground except for a few changes that have been indicated in red on the blue print.

Method of survey

When this survey was begun the only located signals were Urey and North, tho Porc, Pine, and Ore had been built and the angle at Urey, North to Porc had been observed. On reconnaissance in the West Arm of Mirror Hbr. easy access to the south shore of Bertha Bay was discovered where signal Porc was in range with signal Urey. Signal Bertha was marked and built exactly on this range and the angle North-Porc laid off at Urey on the topographic sheet. Then setting up the table at Bertha, orienting on the line thru ~~XXXXXXXX~~ Porc and Urey, and resecting on North a good location for beginning the survey was obtained.

Traversing the tidal slough south (true) of Bertha the topography of the West Arm and Mirror Harbor was obtained and out the entrance to C Ant with occasional opportunity to check the azimuth on North. The average go ahead shots were 200 to 300 meters.

The outside coast from signal Bertha to Point Simmonds is very bold and rugged and was traversed using long shots of 500 to 600 meters resecting on North to check. When Point Simmonds was occupied a three point fix was obtained which checked the traverse within about 3 meters. Cautious Passage and the islands near it were located from triangulation signal Ore.

Continuing south the survey was mainly traverse carrying plane table triangulation along and with occasional opportunity for check sights on triangulation signals. In the entrance to Mirror Harbor the two traverses met within about 2 meters. Traversing down the coast signals were located for hydrography, and signal Dry was located by three intersecting cuts, one each from signals Cor, Pock, and Nar which gave a basis for the survey of Dry Pass.

The survey thru Dry Pass was altogether traverse the only check being at station Twin where clearing weather afforded a sight on North. From Twin, maintaining the azimuth by two long shots and carrying distances of about 500 meters, the work was continued to the last set up on the detached rock on the south end of the island of the Indian Grave where Dry Pass opens into the north end of Portlock Harbor. From here sextant reconnaissance was carried up the north west arm of Pinta Bay the scheme of which is shown in the accompanying sketch.

On account of the poor weather and the amount of triangulation and hydrography in addition to the topography to be done by the small party on the Stmr. Cosmos the work was rushed as much as possible. During the eight days spent in the field on topography there was very little clear weather and contouring was not attempted.

Signals

In Mirror Harbor signal Nickel and the U.S. Mineral Monument are the only positions recoverable; outside nine stations are marked not including the two beacons; and eight can be recovered in Dry Pass.

Offshore dangers

Most of the off shore dangers shown were located by three or more cuts. The two marked "Reported Breakers" were indicated by Mr Flemming whose home is at Nickel and who had observed breakers there in heavy weather. The topographer noted an unusual rise in the ground swell in line with the more southerly of the two at one time when a more than ordinary sea was running. The breaker off signal Pine was located by one topographic cut from Ore and one triangulation cut from Pine. The rock inside of signal Porc was located by triangulation cuts from Ore and North.

Aids to
Navigation

Beacons and flags have been erected by the Juneau Sea Level Copper Mining Co. thru the entrance to Mirror Harbor. The ~~two~~ two beacons, one on Shultz Point and the other on Kinky Island are triangular wooden structures about six feet high built at the top of the cliff. The flags shown are of sheet iron on lengths of pipe set in drill holes in rocks that bare at LLW. They are painted red and black to be left on the starboard and port hand respectively when entering. Originally they were numbered consecutively but in 1917 some of the numbers were missing.

Another useful land mark is the indian grave on the island at the eastern end of Dry Pass which shows up into the Pass and should be well closed out by the Hill Island shore to avoid the shoals shown in the middle of Dry Pass.

Names

All the names shown on the sheet are of local origin and are used by settlers in that vicinity.

Paul V. Lane

Aid. C. & G. Survey

PLANE TABLE POSITIONS, Marked

Sheet #.

<u>Name</u>	<u>Lat.</u>	<u>D M</u>	<u>Long.</u>	<u>D P</u>	<u>Remarks</u>
Bertha	57 - 47	1387	136 - 20	160	regulation topo. disc.
Cape	45	1846	16	960	cement pat. nails.
Cor	46	1131	19	188	triangulation disc "topograph"
Dry	45	1466	18	259	topo. disc.
Grace	46.54	1670	18	990	cement pat.
Kay	46	1363	18	725	topo. disc.
Mink	46	1538	19	554	copper bolt in cement
Nickel	47	1016	18	969	topo. disc.
Pass	45	1408	16	619	cement pat.
Pock	46	971.	18	462	triangulation disc "topograph"
Pole	45	1642	17	420	cement pat. nails.
Pox	46	112.	17	365	" " "
Ro	46	387	18	46	brass plug in cement
Shultz	47	148	19	485	beacon on Shultz Pt.
Side	46	175	16	483	copper bolt in cement.
Star	45	1150	17	396	cement pat, nails.
Tide	45	1051	16	661	" " "
Tip	47	501	19	771	beacon on Kinky I.
Twin	45	1250	17	92	cement pat, nails.
U.S.M.M.	47	1013	19	265	composition plate in cement.

TOPOGRAPHIC SIGNALS - Unmarked. Probably not recoverable.

<u>Name</u>	<u>Lat.</u>	<u>D.M.</u>	<u>Long.</u>	<u>D.P.</u>	<u>Remarks.</u>
Ant	57 - 47	645	136 - 19	495	
Beach	57 - 47	1209	136 - 18	841	
Cloth	57 - 47	1058	136 - 19	920	
Dave	57 - 46	1721	136 - 18	688	
Ed	57 - 47	1177	136 - 19	115	
End	57 - 47	1361	136 - 19	917	
Flag	57 - 47	328	136 - 18	834	
Gull	57 - 47	126	136 - 19	51	
Joe	57 - 47	1155	136 - 19	563	
Kink	57 - 47	276	136 - 19	868	
Lava	57 - 47	1128	136 - 19	209	
Log	57 - 47	780	136 - 19	542	
Mid	57 - 47	1073	136 - 19	566	
Mine	57 - 47	1004	136 - 19	148	
Mon	57 - 47	1009	136 - 19	337	
Pod	57 - 47	1351	136 - 18	903	
Red	57 - 47	240	136 - 19	172	
Sloan	57 - 47	857	136 - 19	536	
Ti	57 0 47	1206	136 - 19	195	
Top	57 - 47	1190	136 0 19	872	
Tree	57 - 47	1238	136 - 19	719	
Water	57 - 47	1058	136 - 19	671	
West	57 - 47	1191	136 - 20	69	
Wharf	57 - 47	237	136 - 18	758	

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

TOPOGRAPHIC TITLE SHEET

The finished Topographic Sheet is to be accompanied by the following title sheet, filled in as completely as possible, when the sheet is forwarded to the Office.

U. S. Coast and Geodetic Survey.

Register No. 3694

State . S. E. Alaska

General locality . . West Coast of Chichagoff Island.

Locality . . From Dry Pass to Cautious Passage.

Chief of party . . . C. G. Quillian, H. & G. E.

Surveyed by . . Paul V. Lane

Date of survey . . August - September 1917

Scale 1 / 10,000

Heights in feet above

Contour interval -feet.

Inked by P. V. Lane . . Lettered by

Records accompanying sheet (check those forwarded): Photographs,

☒ Descriptive report, ☒ Horizontal angle book~~x~~, Field computations,

Data from other sources affecting sheet . Accompanying
blue prints of survey by H. P. Crowther, Deputy Surveyor of
Alaska.

Remarks: