

6943

6943

Form 504 U. S. COAST AND GEODETIC SURVEY DEPARTMENT OF COMMERCE DESCRIPTIVE REPORT	
Type of Survey	Hydrographic
Field No. 06143	Office No. 6943
LOCALITY	
Southeast	
State	ALASKA
General locality	Chilkoot Inlet , Portage Cove
Locality	U.S. Army Dock, Chilkoot Barracks
1943	
CHIEF OF PARTY	
Charles Pierce	
LIBRARY & ARCHIVES	
DATE	

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO.

HYDROGRAPHIC TITLE SHEET

The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. 06143

REGISTER NO. H-6943

State Southeast Alaska

General locality Chilkeet Inlet, Portage Cove

Locality U.S. Army Dock, Chilkeet Barracks, Haines

Scale 1" = 50'
1-600 Date of survey Sept. 14-20, 19 43

Vessel WESTDAHL

Chief of Party Charles Pierce

Surveyed by Charles Pierce and W. M. Hellman

Protracted by Christine Necha

Soundings penciled by Christine Necha

Soundings in ~~FATHOMS~~ feet Feet

Plane of reference MLLW

Subdivision of wire dragged areas by

Inked by J. A. McCormick

Verified by J. A. McCormick

Instructions dated July 20, 19 43

Remarks: Survey requested by U.S. Army Engineers, District
Engineer, Skagway, Alaska.

8943

PRELIMINARY DESCRIPTIVE REPORT TO ACCOMPANY HYDROGRAPHIC

FIELD SHEET 06143

U.S. Army Dock, Chilkoot Barracks

Haines, Alaska

INSTRUCTIONS: DIRECTOR'S dated July 20, 1943

These Instructions were modified after conference with the District Engineer, U.S. Army Engineers at Skagway, Alaska. They desired a large scale survey in the vicinity of the dock for the use of large ships berthing here and for smaller vessels docking along the sides and behind the dock. At the time we worked here no plans were available indicating what depth of water was available at this dock.

LIMITS

The U.S. Army dock at Chilkoot Barracks, Haines Alaska including hydrography on all sides for a distance of 100 meters from the faces of the dock.

CONTROL

The only control on this sheet is triangulation station HAINES 1943, which is tied in with taped distances to identifiable features on the dock and a hydrographic signal located on the approach from the shore.

The main dock was taped and plotted on the boat sheet to a scale of one inch = 50 feet. The boat sheet was taken into the field on a plane table board and setting up over the inshore end of the dock and orienting on a point at the extreme end of the dock, all features in the vicinity of the Barge Unloading Dock were located by standard plane table methods using a tape in place of a telemeter rod.

All of the sounding lines run were controlled by ranges, some natural objects on the dock but the majority set with a tape and a 4 inch transit normal to the faces of the dock.

SURVEY METHODS

All of the sounding work on this sheet was accomplished with a hand lead from a dinghy. A reel was mounted on the midship thwarts upon which was wound an accurately marked lead line marked every five meters, called the tag line. An outboard motor furnished the power for controlling the dinghy on the range lines.

The personnel used in the dinghy for this hydrography was as follows: one helmsman whomperated the outboard and maintained the dinghy on range and kept tension on the tag line. One reel operator who slacked off on the tag line as the sounding boat backed off on the range line and called out the marks as they came up on the reel to the Recorder. One leadsman who sounded at each 5 meter mark as it came up on the reel, abreast of the leadsman. One Recorder to recorded all the data such as depth of water, distance off front range and the number of the range line run; he also watched that the dinghy was maintained on the range line when the soundings were taken. One officer and one man set the ranges on the dock or along the shore line as the work progressed.

The designated numbers of the front ranges are shown on the boat sheet but the locations by taped distances of these points are shown in sketches in Sounding volume 1, pages 2, 63 and 65.

The soundings taken along the face of the dock starting from the northwest corner designated "A" were taken every 10 feet and the letters indicating where measurments commenced are shown in green ink in Volume 1, page 3.

It is believed that all of the data necessary for drawing the dock and for laying down the range lines are shown in sketches in the sounding volume but where any data is lacking the boat sheet should be consulted as the work was plotted each night following the days work and should contain all information.

The true meridian shown on the boat sheet was determined by occupying triangulation station HAINES 1943 with a theodolite and measuring the angle between triangulation station SHIYI 1943 and the inshore end of the dock; from geodetic data the azimuth from Haines to SHIYI was obtained and the angle to the true meridian was laid down on the boat sheet with a steel protractor.

The area east of the dock was not sounded as the Army had a crane barge and other barges moored here and did not clear this area for sounding.

At the barge unloading dock the grids for supporting the barges was observed just awash at 09 hours, 09 minutes, 30mseconds, on September 20, 1943, 120° West standard time. From tidal observations this stage of grids awash occurs at a tide of 9.4 feet above mean lower low water or one foot above half tide level.

TIDES

A portable automatic tide gage was operated at the U.S. Army dock, Chilkoot Barracks, Haines, Alaska during the period of this survey. It is interesting to note that our tidal observations referred to existing bench marks show an upward movement of the land mass of 1.2 feet since the tidal observations of 1922.

STATISTICS

Area in square statute miles ---- 0.1
Statute miles of sounding lines 5.0
Number of soundings recorded ----1953

Respectfully Submitted

Charles Pierce
Charles Pierce Lt. Cmdr. USCG&GS
Commanding Officer MV WESTDAHL
November 30, 1943

H-6943

Haines, Alaska

Seattle Processing Office Notes

The line 4d, running southeast from the southernmost point of the wharf does not agree with the lines crossed. We surmise that the sounding party was mistaken in the back range and that the azimuth of the line 4d should be about 128 degrees. The rejection of the line is recommended. 4d rejected

The line 1d is deeper by one to two feet than lines 1c to 13c. Also lines 2d and 3d are deeper by about a foot than crossed line 1c to 7c. The boat sheet shows closer agreement in these soundings and smoother bottom curves. 1-3d rejected.

The dolphins shown on page 65 of the sounding record run off of sheet H-6943. They were plotted on H-6942 from this data. (1943) ✓

Edgar E. Smith

Edgar E. Smith
Assoc. Cartographic Engineer
Seattle Processing Office.

Approved and Forwarded:

F. H. Hardy

F. H. Hardy
Officer in Charge,
Seattle Processing Office.

Surveys Section (Chart Division)

HYDROGRAPHIC SURVEY NO. **H6943**

Records accompanying survey:

Boat sheets; sounding vols.; wire drag vols.;
 bomb vols.; graphic recorder rolls;
 special reports, etc.

The following statistics will be submitted with the cartographer's report on the sheet:

Number of positions on sheet	Ranges + distances
Number of positions checked
Number of positions revised
Number of soundings recorded	.1953.
Number of soundings revised (refers to depth only)7.
Number of soundings erroneously spaced	...13.
Number of signals erroneously plotted or transferred	...0.
Topographic details	Time
Junctions	Time
Verification of soundings from graphic record	Time

Verification by J. A. McCormick Total time .13 hrs. Date 8/5/44.

Review by J. A. McCormick Time .2 hrs. Date 8/7/44.

GEOGRAPHIC NAMES

Survey No. **H6943**

Name on Survey											
	A	B	C	D	E	F	G	H	K		
<u>Southeast Alaska</u>											1
<u>Portage Cove</u>								590350			2
<u>U.S. Army Wharf</u>								"			3
											4
											5
											6
											7
<u>Haines</u>											8
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											27

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

Names underlined in red approved
by L. Heck on 8/14/47

H-6943

Tidal Note

Southeastern Alaska

Chilkoot Inlet

Hains

Army Wharf, Chilkoot Barracks

Portable Automatic Gage

Latitude 59° 13:77

Longitude 135 26.15

Staff reading of MLLW minus 1.2 feet

(See Director's Letter of Oct. 26, 1943, to
C. O. WESTDAHL)

MEMORANDUM

IMMEDIATE ATTENTION

SURVEY
 DESCRIPTIVE REPORT } No. H **H6943**
 PHOTOSTAT OF } No. T

{ received
 { registered
 { 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			
22			
24			
25			
26			
30			
40			
62			
63			
82			
83			
88			
90			

RETURN TO

82	
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r. Rude

L.C.C.
H.C.

TIDE NOTE FOR HYDROGRAPHIC SHEET

June 21, 1944

~~Division of Hydrography and Topography:~~

✓ Division of Charts: Attention: H. R. EDMONSTON

Plane of reference approved in
1 volumes of sounding records for

HYDROGRAPHIC SHEET 6943

Locality Chilkoot Inlet, Portage Cove, Alaska

Chief of Party: Chas. Pierce in 1943
Plane of reference is mean lower low water
-1.2ft. on tide staff at Haines
24.7ft. below B. M. 2 (1921)

Height of mean high water above plane of reference is 15.9 ft.

Condition of records satisfactory except as noted below:



Chief, Division of Tides and Currents.

DIVISION OF CHARTS

REVIEW SECTION - SURVEYS BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. 6943

Field No. 06143

Southeast Alaska; Portage Cove; U. S. Army Dock
Surveyed in September 1943; Scale 1:600
Project C. S. 306

Soundings:

Control:

Hand lead

Ranges and distances

Chief of Party - Charles Pierce
Surveyed by - Charles Pierce; W. M. Hellman
Protracted by - C. Nechaj
Soundings plotted by - C. Nechaj
Verified and inked by - J. A. McCormick
Reviewed by - J. A. McCormick
Inspected by - H. R. Edmonston, August 7, 1944

1. Sounding Line Crossings

Satisfactory.

2. Depth Curves

Curves are exceptionally smooth for such a large scale survey.

3. Adjoining Surveys

The surrounding area was surveyed on H-6942 (1943). The two surveys agree very well.

4. Previous Surveys

The present survey is on such a large scale that there is no actual overlap with 1:40,000 scale surveys H-2057 (1890) and H-4226 (1922) W.D. The old surveys have been considered in the review of H-6942 (1943).

5. Comparison with Chart 8303 (Print of April 5, 1943)

There are no depths charted within the subject area.

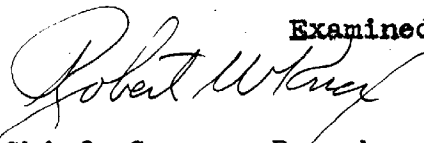
6. Compliance with Project Instructions

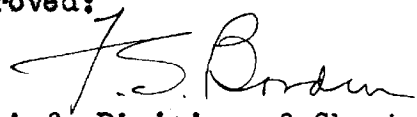
Satisfactory.

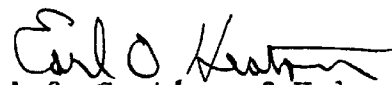
7. Additional Field Work Recommended


None. The survey is an excellent example of the possibilities of extremely large scale surveys accomplished by means of ranges and measured distances.

Examined and approved:


Chief, Surveys Branch


Chief, Division of Charts


Chief, Section of Hydrography


Chief, Division of
Coastal Surveys

before ver. + review

Examined for Cht. 8202 - no correction. 7/12/44. G.R.

applied to Cht 8303 before review 8/4/44 HFR

" " " 8303 (1:10 ova insert) 12/30/44 JHE

C