

7929

ORIGINAL

Diag. Cht. No. 6450-2

ES-271

Form 504

U. S. COAST AND GEODETIC SURVEY
DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. SU-1444 Office No. H-7929

LOCALITY

State WASHINGTON

General locality PUGET SOUND

Locality ADMIRALTY INLET

194 4

CHIEF OF PARTY

C. D. MEANEY

LIBRARY & ARCHIVES

DATE JUL 25 1952

B-1870-1 (1)

7929

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. SU-1444 ✓

REGISTER NO. H-7929

State Washington ✓

General locality Puget Sound ✓

Locality Admiralty Inlet ✓

Scale 1:10,000 Date of survey December, 1944 ✓

Vessel SURVEYOR ✓

Chief of Party C.D. MEANEY ✓

Surveyed by C.D. Meaney, L.S. Hubbard, R.C. Rowse ✓

Protracted by Marion G. McLean

Soundings penciled by Marion G. McLean

Soundings in fathoms ~~feet~~ ✓

Plane of reference M L L W ✓

Subdivision of wire dragged areas by -

Inked by R. E. Elkins

Verified by R. E. Elkins

Instructions dated September 30, 1941, 1941 ✓

Remarks: Project CS-271. This survey is incomplete, surveys were discontinued in this area.

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NOTES FOR DESCRIPTIVE REPORT TO ACCOMPANY HYDROGRAPHIC
SURVEY Field No. SU-1444. H-7929

Admiralty Inlet, Washington

1944

Scale 1:10,000

Ship SURVEYOR

C.D. MEANEY, Commanding

A. Project

The authority for this survey is contained in the Director's Instructions; Project 271, dated September 30, 1941, and letter from Supervisor, N. W. District, dated November 11, 1944.

B. Survey Limits and Dates

This survey consists of several lines of hydrography in Admiralty Inlet between the latitude of Marrowstone Point on the north and Bush Point on the south. It is a revision survey of an area shown on Chart 6450. Additional sounding and topography should be executed on this sheet. ~~before the chart is revised.~~ This survey makes a junction on the north with sheet H-6816, 1942-1943, scale 1:10,000. Hydrography was started on December 14, 1944 and was suspended on December 15, 1944. The SURVEYOR was instructed to carry on surveys in Hood Canal when the winter season was resumed.

C. Vessel and Equipment

The SURVEYOR was the only vessel used in this survey, no work being accomplished in the shoaler areas.

The turning radius of the SURVEYOR, with a hard over helm is about 200 meters.

The Dorsey III fathometer, serial No. 40, was used for sounding, with check recordings being obtained by means of the U.S. Navy N.M.C. fathometer, No. 52. For brief intervals when the Dorsey fathometer was not functioning soundings are scanned from the N.M.C. fathograms.

fathograms were not available at time of verification and review.

Both fathometers were used in depths from 40 to 105 fathoms.

The Dorsey fathometer is standardized for a velocity of sound of 820 fms. per. second. The N.M.C. fathometer is standardized for a velocity of sound of 800 fms. per. second.

Serial temperatures and salinities were taken on December 15, 1944.

D. Tide Stations

A portable automatic tide gage was installed on a dock south of Marrowstone Point, in Latitude $48^{\circ} 05.5'$ N. Longitude $122^{\circ} 41.4'$ W. Maragrams from this station should be used for tide reducers for all the area sounded.

E. Smooth Sheet

(to be written by Processing Office)

F. Control Stations

Triangulation stations RAWLINS, PARAPET, MADULE and LAGOON 1921, established in 1921 by E.W. Bickelburg, Chief of Party, were recovered. Stations PARAPET 2, COOK, CRAVE, MARROW and LAGOON 1942, established in 1941 and 1942 by L.D. Graham, Chief of Party, were recovered. Additional triangulation control was established from these recovered triangulation stations.

The positions of all signals used in hydrography were determined by triangulation.

G. Shoreline and Topography

No topography was executed during this the field season of this survey.

H. Soundings

All soundings were obtained by fathometer, the readings of the Dorsey III fathometer being checked by fathograms from the U.S. Navy N.M.C. fathometer recorder.

lost Dec. 1952

The usual corrections for initial settings, salinity and density and tide were applied.

I. Control of Hydrography

Visual three point fixes were used to control all hydrographic lines.

J. Adequacy of Survey

There were only several lines of hydrography run on this survey. Inshore hydrography was not started. Additional hydrography and topography should be executed.

Instructions call for continuing hydrographic surveys south of the area surveyed in 1944.

A junction was made on the north end with survey #^{H-6816} executed in ^{1942 &} 1943 by the SURVEYOR, C.M. DURGIN, Chief of Party. The soundings of the two surveys check satisfactorily. Depth curves can be drawn at the junctions.

K. Crosslines

About three per cent of cross lines were run. There were no discrepancies in crossings noted on the beat sheet.

L. and M. Comparison with Prior Surveys & Chart

Previous sounding available are shown on Chart 6450.

Plans have been made to resurvey Admiralty Inlet and revise the chart at some time in the future. Additional hydrography should be executed before ~~the present chart is revised.~~

N. Dangers and Shoals

No dangers or shoals exist in the area actually sounded.

O. Coast Pilot Information

Tidal currents of moderate strength were encountered. The currents in general follow the direction of the channel. Eddies exist at strength of current in an area about $\frac{1}{4}$ mile in diameter, located in Latitude $48^{\circ} 03.0'$ and Longitude $122^{\circ} 38.2'$.

All the area between Marrowstone Point Light and Bush Point Light is at present restricted from anchoring by the military authorities.

revised to area north of Lagoon Pt. (Lat. $48^{\circ} 04.5'$), N.M. 5 (1945).

P. Aids to Navigation

Marrowstone Point Light and Bush Point Light are the only charted aids to navigation in the area surveyed. Their positions are listed on form 567. A new position for Bush Point Light was obtained by triangulation.

L-267 (1945)

Q. Landmarks for Charts

Landmarks which should be charted are listed on form 567. The landmarks are as follows: ^① Chimney on Housey, Marrowstone Point; ^② White wooden tower near station PARAPET 1942; ^③ White wooden tower on high ground; ^④ white wooden tower on low ground; ^⑤ Bush Point Light. *L-267 (1945) charted 5-31-45.*

R. Geographic Names


No changes or additions to charted names can be recommended.

S. Silted Areas

No silted areas were detected on the fathograms.

U. Velocity Corrections

The velocity corrections were determined in accordance with standard procedure. A copy of the abstract of the corrections is included in this report.


C.D. MEANEY, Lieut. Comdr., C. & G. Survey
Commanding Ship SURVEYOR

Su 1444

Admiralty Inlet

Washington

Tide Note.

March 29, 1945

MEMO:

The Marigrams from the Marrowstone Point - tide gage were still in the field at the time of turning records over to the Processing Office. They will be picked up on the way north and mailed to the Processing Office.

C.D. MEANEY
Commanding Officer
U.S.C. & G.S.S. SURVEYOR

ABSTRACT OF VELOCITY CORRECTIONS

Hydrographic Survey: Field No. SU-1444

Period: December 14 & 15, 1944

Dorsey III fathometer, 820 fms. per second.

Depth		Correction
fms.	feet.	feet.
30 - 0	to 41-3	- 3.0
41 - 4	to 53-3	- 4.0
53 - 4	to 65-3	- 5.0
65 - 4	to 78-0	- 6.0
78 - 1	to 90-0	- 7.0
90 - 1	to 102-0	- 8.0
102 - 1	to 114-0	- 9.0
114 - 1	to 126-3	- 10.0

LIST OF STATIONS ON FIELD NO. SU-1444

Name used in hydrographic survey.	Origin of Station
Bush	Bush Point Light, 1944
Soaf	Scaffold, lower, 1944
Stone	Chimney on white house at Marrowstone Point, 1944.
Cock	Cock, 1941, 1944 (no check)
Par	Par, 1944
Lagoon	Lagoon, 1921
Yel	Yel, 1944

Su 1444
Admiralty Inlet
Washington

Processing Office Notes.

This sheet was started as part of Proj. 271, resurvey of Admiralty Inlet. The SURVEYØRN had filled less than half a sounding record when work was suspended. It was expected that work would be resumed and the sheet has been held from year to year, the amount accomplished being so little. As there seems no present prospect that the work will be continued the sheet is forwarded to Washington. If work should be undertaken again the smooth sheet and boat sheet could be returned to Seattle.

Edgar E. Smith
Edgar E. Smith
Cart. Engr.

E. Smith
11/16/52

Su 1444

Admiralty Inlet

Washington

List of geographic names
penciled on smooth sheet.

Admiralty Inlet

Marrowstone Island

Whidbey Island

MLLW = 2.6 feet

Form 862
Ed. May, 1929
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

TIDES: HOURLY HEIGHTS

Station: Fort Flagler, Marrowstone Island, Wash. Year: 1944
 Observer: _____ Lat. _____ Long. _____
 Time Meridian: 105° W Height datum is staff 0.0 which is 2.6 ft. below ~~B.M.~~ LLW

U. S. GOVERNMENT PRINTING OFFICE 11-702

Month and Day	mo.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	Horizontal Sum
Day of Series	<u>Dec</u>	<u>14</u>	<u>15</u>										
Hour	Feet		Feet		Feet		Feet		Feet		Feet		Feet
0	2.6	0.0	1.8	-0.8	.	.	.	.	.	.	.	.	.
1	3.9	1.3	3.3	0.7	.	.	.	.	.	.	.	.	.
2	5.5	2.9	5.2	2.6	.	.	.	.	.	.	.	.	.
3	7.2	4.6	7.2	4.6	.	.	.	.	.	.	.	.	.
4	8.7	6.1	9.0	6.4	.	.	.	.	.	.	.	.	.
5	9.9	7.3	10.2	7.6	.	.	.	.	.	.	.	.	.
6	10.4	7.8	10.9	8.3	.	.	.	.	.	.	.	.	.
7	10.1	7.5	11.0	8.4	.	.	.	.	.	.	.	.	.
8	9.4	6.8	10.5	7.9	.	.	.	.	.	.	.	.	.
9	5.9	6.3	9.9	7.3	.	.	.	.	.	.	.	.	.
10	8.6	6.0	9.3	6.7	.	.	.	.	.	.	.	.	.
11	8.6	6.0	9.0	6.4	.	.	.	.	.	.	.	.	.
Noon	9.0	6.4	9.2	6.6	.	.	.	.	.	.	.	.	.
13	9.5	6.9	9.6	7.0	.	.	.	.	.	.	.	.	.
14	10.1	7.5	10.0	7.4	.	.	.	.	.	.	.	.	.
15	10.6	8.0	10.6	8.0	.	.	.	.	.	.	.	.	.
16	10.6	8.0	10.9	8.3	.	.	.	.	.	.	.	.	.
17	9.8	7.2	10.4	7.8	.	.	.	.	.	.	.	.	.
18	8.3	5.7	9.1	6.5	.	.	.	.	.	.	.	.	.
19	6.4	3.8	7.5	4.9	.	.	.	.	.	.	.	.	.
20	4.1	1.5	5.5	2.9	.	.	.	.	.	.	.	.	.
21	2.3	-0.3	3.2	0.6	.	.	.	.	.	.	.	.	.
22	1.1	-1.5	1.6	-1.0	.	.	.	.	.	.	.	.	.
23	1.0	-1.6	0.6	-2.0	.	.	.	.	.	.	.	.	.
Sum													

Read from Wash 79/95

Sum for _____ = _____ Divisor = (28d) 672; (29d) 696; (30d) 720; (31d) 744. Mean for month = _____

Tabulated by _____ Date _____ Summed by _____ Date _____

TIDES: HOURLY HEIGHTS

Station: _____ Year: _____
 Observer: _____ Lat. _____ Long. _____
 Time Meridian: _____ Height datum is _____ which is _____ ft. below B. M. _____

U. S. GOVERNMENT PRINTING OFFICE 11-792

Month and Day	mo.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	Horizontal Sum	
Day of Series													
Hour	Feet		Feet		Feet		Feet		Feet		Feet		Feet
0
1
2
3
4
5
6
7
8
9
10
11
Noon
13
14
15
16
17
18
19
20
21
22
23
Sum

Sum for _____ = _____ Divisor=(28d) 672; (29d) 696; (30d) 720; (31d) 744. Mean for month= _____

Tabulated by _____ Date _____ Summed by _____ Date _____

Statistics for Survey, Field No. SU - 1444.

Day	Date 1944	Vol.	No. Positions	No. St. Miles
A	Dec. 14	1	76	37.7
B	Dec. 15	1	38	16.1

Total Statistics for Survey:

114 Positions

53.8 Statue Miles

5.0 Sq. St. Miles

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. H-7929...

Records accompanying survey:

Boat sheets .1...; sounding vols. .1...; wire drag vols.;
 bomb vols.; graphic recorder rolls;
 special reports, etc. 1. Descriptive Report; 1. Smooth Sheet; 1. Cahier..
 Velocity Corrections:.....

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

Number of positions on sheet	.....	114
Number of positions checked	.....	3
Number of positions revised	.....	—
Number of soundings revised (refers to depth only)	.....	—
Number of soundings erroneously spaced	.....	—
Number of signals erroneously plotted or transferred	.....	—
Topographic details	Time	.....
Junctions	Time	1 hr.
Verification of soundings from graphic record	Time	.....

Verification by..... *R.E. Elkins* Total time *12 hr.* Date *12-15-52*

Reviewed by..... *R.E. Elkins* Time *22 hr.* Date *12-17-52*

GEOGRAPHIC NAMES

Survey No. H-7929

Name on Survey										
	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		
	A	B	C	D	E	F	G	H	K	
<u>Washington</u>				(for title)					B.64	1
<u>Puget Sound</u>				(" ")					"	2
<u>Admiralty Inlet</u>									"	3
<u>Narrowstone Island</u>		X								4
<u>Narrowstone Point</u>		✓		(location of tide gage)						5
<u>Whidbey Island</u>		X								6
<u>Bush Point</u>		✓								7
Lagoon Point		-								8
Nodule Point		✓								9
Liplip Point										10
										11
										12
										13
										14
										15
										16
										17
										18
										19
										20
										21
										22
										23
										24
										25
										26
										27

Names underlined in red are approved.
8-6-52
L. Heck

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-7929

FIELD NO. SU-1444

Washington, Puget Sound, Admiralty Inlet

Project No. 271

Surveyed - December 1944

Scale 1:10,000

Soundings:

Control:

Dorsey III Fathometer
NMC Fathometer

Sextant fixes on shore signals

Chief of Party - C. D. Meany
Surveyed by - C. D. Meany, L. S. Hubbard, R. C. Rowse
Protracted by - M. G. McLean
Soundings plotted by - M. G. McLean
Verified and inked by - R. E. Elkins
Reviewed by - R. E. Elkins, 17 December 1952
Inspected by - R. H. Carstens

1. Shoreline and Signals

No contemporary shoreline surveys of this area have been made.

The origin of the control is given in the Descriptive Report.

2. Sounding Line Crossings

Depths at crossings are in good agreement.

3. Depth Curves and Bottom Configuration

The configuration of the bottom is incompletely revealed by the sparse lines on this reconnaissance survey. Additional soundings are required for adequate delineation of the depth curves.

With minor irregularities the bottom slopes from depths of about 55 fms. to a depression of 106 fms.

4. Junctions with Contemporary Surveys

Present depths are in adequate agreement with depths on H-6816 (1942-43) on the north and with charted depths on the east, west, and south.

5. Comparison with Prior Surveys

- a. H-333 (1852) 1:200,000
H-510 (1855) 1:100,000

These early reconnaissance surveys contain no critical soundings within the area of the present survey. Differences of as much as 40 fms. between prior and present soundings are ascribed to faulty positioning of the early reconnaissance soundings.

- b. H-1729 (1885-86) 1:20,000

A comparison between depths on the present survey and on the prior survey reveals only minor differences of 1 to 2 fathoms in 40-to 100-fm. depths. The present survey supplements the sparse hydrographic information in this area contained on the prior survey.

6. Comparison with Charts

- 6405, latest print date 8/14/50
- 6450, latest print date 8/11/52

A. Hydrography

The charted hydrography originates with the prior survey H-1729 (1885-86). The present reconnaissance survey should be used to supplement the charted depths in this area.

B. Aids to Navigation

No aids to navigation are charted within the area of this survey.

7. Condition of Survey

- a. The sounding records and Descriptive Report are complete and comprehensive.
- b. The smooth plotting was well done.
- c. The sparse development on the present survey furnished information only of a reconnaissance nature.

8. Compliance with Project Instructions

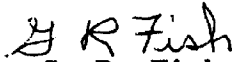
This survey complies with the Project Instructions except for very wide spacing of sounding lines. Termination of surveying operations in this area in 1944 left the survey incompletd.

9. Additional Field Work Recommended

No additional field work is recommended on this reconnaissance survey. New basic surveys which will cover the area of the present survey are to be made extending southward from survey H-6816.



H. R. Edmonston
Chief, Nautical Chart Branch

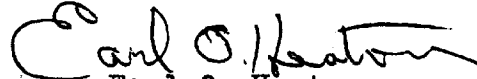


G. R. Fish
Chief, Section of Hydrography

Examined and approved:



H. Arnold Karo
Chief, Division of Charts



Earl O. Heaton
Chief, Division of Coastal Surveys

APPROVAL SHEET

The field work on this survey was conducted under the personal supervision of Commander Glendon E. Boothe who has inspected the work and boat sheet.

The survey is believed complete and adequate for charting and complies with the instructions.



Riley J. Sipe
Comdr., USC&GS
Comdg. USC&GSS SURVEYOR

RAC

TIDE NOTE FOR HYDROGRAPHIC SHEET

~~Division of Hydrography and Topography~~

11 August 1952

Division of Charts: R. H. Carstens

Plane of reference approved in 1
volumes of sounding records for

HYDROGRAPHIC SHEET 7929

Locality Admiralty Inlet, Washington

Chief of Party: C. D. Meaney in 1944
Plane of reference is mean lower low water, reading
2.6 ft. on tide staff at Fort Flagler, Marrowstone I.
9.8 ft. below B. M. 1 (1944)

Height of mean high water above plane of reference is 8.1 feet.

Condition of records satisfactory except as noted below:

E. C. McKay

Section of Tides
Chief, ~~Division of Tides and Currents.~~

NAUTICAL CHARTS BRANCH

SURVEY NO. H-7929

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
8/26/52	6401	N.W. Burgoyne	Before After Verification and Review - <i>EXAM - No critical corr.</i>
1/14/53	6405	G.B. Samuel	Before After Verification and Review
4 May 53	6450	H.E. Mae Evers	Before After Verification and Review
1-8-54	6401	J.H. Benson	Before After Verification and Review <i>Fully applied</i>
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
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			Before After Verification and Review
			Before After Verification and Review

M-2168-1

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.