

4713

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Form 504

**DEPARTMENT OF COMMERCE**  
U. S. COAST AND GEODETIC SURVEY

....., *Director*

G. C. JONES  
L. O. A.

State: Washington..... Acc. No.

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**DESCRIPTIVE REPORT**

~~Topographic~~ } Sheet No. <sup>6</sup> 4713  
Hydrographic }

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LOCALITY

Hood Canal

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Squamish Harbor to Lofall

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1927

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CHIEF OF PARTY

G. C. Jones

DESCRIPTIVE REPORT TO ACCOMPANY

HYDROGRAPHIC SHEET

REGISTER No.

Field No. 6 713

SQUAMISH HARBOR, HOOD CANAL 1927

Instructions and Limits of Work : The hydrography on this sheet was executed in accordance with the Director's instructions to the Commanding Officer of the Motor Vessel NATOMA, dated May 3, 1927. The sheet embraces a survey of Squamish Harbor and that part of Hood Canal contiguous.

Dangers : The Sisters Rocks were found to bare  $1/2$  and  $2/6$  fathoms at MLLW.

A sunken rock covered by  $1/2$  fathom at MLLW was located midway between the Sisters and shore. This is marked by kelp as is a  $5/6$  fathom shoal found a quarter mile westerly from it.

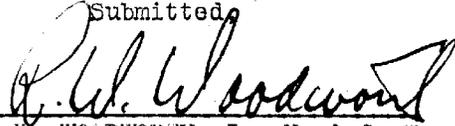
A sunken rock, baring  $1/6$  fathom at MLLW was found inside the one fathom curve 100 meters NE of "LEK".

The high point on Case Shoal is covered by  $1/6$  fathoms at MLLW.

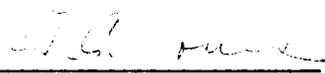
Survey Methods : Inshore soundings were taken with the usual bronze - center lead line from launch No. 61. Sounding speed was regulated with the aid of the Kitchin rudder installation. The running of uniform and evenly spaced lines was helped by the use of a 180 degrees range-finder.

The uniformity of bottom contours made but little development necessary.

Submitted,

  
R. W. WOODWORTH, Jr. H. & G. E.

APPROVED and FORWARDED:

  
G. C. JONES, H. & G. E.  
Chief of Party.

STATISTICS.

Hydrographic Sheet # 6. 4712

Squamish Harbor, Wn.

1927.

M. V. NATOMA

G. C. Jones, Comdg.

- - - - -

Unit for soundings - - - - - fathoms.

Location of portable automatic tide gauge - - on south face of  
Commercial Dock, Port Gamble, Wn, - - Lat. 47-51.5 ; Long. 122-35.2

Plane of reference - - MLLW - - 3.78 ft, on staff.

Lowest tide observed - - - - - 0.8 ft. on staff.

Highest tide observed - - - - - 15.1 ft. on staff.

- - - - -

Statistics - Hydro, sheet # 6.

<u>Date</u>	<u>Letter</u>	<u>Vol.</u>	<u>Positions</u>	<u>Soundings</u>	<u>Miles, stat.</u>	<u>Vessel</u>
July 25, 1927.	a	1	96	211	8.7	Lch. 4.
" 26, "	b	"	197	448	18.7	"
" 28, "	c	"	101	295	11.0	"
" " "	"	2	69	181	6.8	"
Aug. 1, "	d	"	139	353	16.6	"
" 2, "	e	"	140	376	21.6	"
" " "	"	3	35	139	4.9	"
" 5, "	f	"	151	507	20.8	"
" 8, "	g	"	61	169	5.8	"
" 9, "	h	"	36	105	3.0	"
" " "	A	1	63	63	12.2	Natoma
" 10, "	B	"	27	27	4.6	"
			<u>Totals --</u>	<u>1115</u>	<u>2874</u>	<u>134.7</u>

✓ W

## Section of Field Records

Report on sheet No. 4713

Chief of Party G.C. Jones

Protracted by R.W. Woodworth

Verified and inked by J.J. Walker

Surveyed in 1927

Surveyed by O.S. Reading

Soundings plotted by R.W. Woodworth

There were ample notes as to bottom characteristics. No headings by compass were given but none were needed as the notes were clear without them. Positions were plotted from angles and ranges with the exception of a very few. These few were either plotted from the boat sheet or from remarks and general directions. The time given was in most cases apparently correct. Where mistakes in time were made the correct time was generally obvious. Remarks as to changes in direction of lines and ends of lines were ample.

Five hundred and thirty six positions or 48% were checked and 12 of these were found incorrectly plotted. Time intervals were fairly well adhered to in plotting of soundings but where soundings were taken close together in shallow water some of them were omitted.

The sheet, when received, was clean and the work was all legible.

The names of some of the signals on the smooth sheet did not agree with the names on the topographical sheet.

A boulder, bare at low water, about 100 meters east of signal Rock was shown on the boat

sheet. No reference to this boulder was found in  
the sounding volumes or elsewhere.

Reviewed by

Feb'y. 15, 1928

Respectfully submitted  
J. Walker.

January 25, 1928.

Division of Hydrography and Topography:

✓ Division of Charts:

Tide reducers are approved in  
4 volumes of sounding records for

HYDROGRAPHIC SHEET 4713

Locality: HOOD CANAL, WASHINGTON.

Chief of Party: G. C. Jones, 1927.  
Plane of reference is M L L W  
3.7 ft. on tide staff at Port Gamble

Condition of records satisfactory except as checked below:

1. Locality and sublocality of survey omitted.
2. Month and day of month omitted.
3. Time meridian not given at beginning of day's work.
4. Time (whether A.M. or P.M.) not given at beginning of day's work.
5. Soundings (whether in feet or fathoms) not clearly shown in record.
6. Leadline correction entered in wrong column.
7. Field reductions entered in "Office" column.
8. Location of tide gauge not given at beginning of each day's work.
9. Leadline corrections not clearly stated.
10. Kind of sounding tube used not stated.
11. Sounding tube No. entered in column of "Soundings" instead of "Remarks".
12. Legibility of record could be improved.
13. Remarks.

  
Chief, Division of Tides and Currents.

ADDRESS THE DIRECTOR  
U. S. COAST AND GEODETIC SURVEY

AND REFER TO No. 11-DRM

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

WASHINGTON

March 1, 1928.

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4713

Hood Canal - Squamish Harbor to Lofall, West Coast of Washington

Surveyed in 1927

Instructions dated May 3, 1927 (NATOMA)

Chief of Party, G. C. Jones.

Surveyed by G. C. Jones, O. S. Reading.

Protracted and soundings plotted by R. W. Woodworth.

Verified and inked by J. T. Walker.

1. The original instructions were carried out to the letter, the lines in all cases being spaced the specified distances.
2. The development of shoal areas and dangers is considered sufficient. The lines on shoals were spaced from twenty-five to fifty meters apart. Least depths were obtained and proper notation made in the records.
3. A few minor changes were made in the sheet as inked. The greater part of these were changes in location of the depth curves made without shifting soundings. In two cases the original record was modified to permit a new spacing of soundings, as the original arrangement was somewhat in error due to mistakes in recording.
4. All unusual changes in direction of depth curves were investigated and plotting of position affecting them checked.
5. No comparison with adjacent sheets was made as these have not yet been inked.

DEPARTMENT OF COMMERCE  
BUREAU OF OCEANOGRAPHY  
WASHINGTON

OFFICE OF THE CHIEF OF BUREAU  
WASHINGTON, D. C.

Note A careful lookout was kept at all times for help or other indications of the P.D rocks mentioned while running the system of lines. All indications were thoroughly examined and it was considered by the field party that the rocks located were those indicated as P.D on chart 6450 about in an incorrect position. In the opinion of the undersigned, wire drag examination can be safely deferred until such time as the whole area of Hood Canal can be examined by this method.

O. Reading

Subject is considered in error  
during Pre-Survey Review  
1 Dec. 1960 L.S.S.

6. Field plotting and drafting, good.  
Inking, good.
7. Reviewed by E. R. McCarthy, Jr. H. & G. Engr., Feb. 21, 1928.

Approved: .

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Chief, Section of Field Records (Charts)

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Chief, Section of Field Work (H. & T.)

In Spanish Harbor, the Coast Pilot notes and the chart shows two rocks, one with 7 ft and the other with 15 ft,  $\frac{3}{8}$  and 1 mile westward of the Sister. There are marked P.D. and the source of the report of their location is unknown. It is recommended that neither be shown on the new edition of the chart. Two rocks were located by this party within four the Sister which may have been ~~the same~~ the rocks noted but locations were in error in the reports. Unfortunately the field party failed to note whether an examination of the reported rocks was made. <sup>\* see note on opposite page</sup> It is recommended that an examination with a small drag be made as soon as a party is available.

L. Colwell.  
Ch. Sect Field Work

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

4713

The finished Hydrographic 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. <sup>6</sup> 4713

State . . . Washington . . . . .

General locality . . . ~~Puget Sound~~ Hood Canal . . . . .

Locality . . . Squamish Harbor to Lofall . . . . .

Chief of party . . . G.C. Jones . . . . .

Surveyed by . . . O.S. Reading . . . . .

Date of survey . . . July 25 -- August 10, 1927. . . . .

Scale . . . 1 : 10,000 . . . . .

Soundings in . . . fathoms . . . . .

Plane of reference . . . MLLW . . . . .

Protracted by Woodworth . Soundings in pencil by Woodworth.

Inked by . . . . . Verified by . . . . .

Records accompanying sheet (check those forwarded):

- \* Des. report, ----- Tide books, ----- Marigrams, 1 Boat sheets,
- 4 Sounding books, ----- Wire-drag books, ----- Photographs.
- Data from other sources affecting sheet . . . . .

Remarks:

