4711

4711

Form 504

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

....., *Director*

State: Washington

No.

DESCRIPTIVE REPORT

~~*Topographic*~~
Hydrographic | *Sheet No.* 4711

LOCALITY

Puget Sound

Oak Bay to Pt. No Point

1927

CHIEF OF PARTY

G.C. Jones

GOVERNMENT PRINTING OFFICE

4711

DESCRIPTIVE REPORT TO ACCOMPANY HYDROGRAPHIC SHEET.

Register No. 4711

Field No. 4

Admiralty Inlet, Vicinity of Foulweather Bluff.

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-rd 1927. It includes the part of Admiralty Inlet embraced within lines from Double Bluff south to Point No Point and west to Olele Pt.

With the exception of the Klas Rock group some 400 meters offshore of Basalt Pt. this sheet is free of any outlying dangers. Some few rocks, hereafter noted, constitute danger to close-running small craft only.

Dangers: The rocks shown about 180 meters off the northeast point of Foulweather Bluff on Chart 6450 was thoroughly searched for and was re-located as only 50 meters outside the HW line and within the one fathom curve. Two other sunken rocks were located to the westward off Foulweather Bluff, one 140 meters offshore, the other 50 meters offshore, both outside the one fathom curve. A heavy kelp growth warns against these dangers. See Suppl. Review attached. A.L.S.

A sunken rock was found inside the one fathom curve 160 meters SSW from ⊙ "SEC" on the south side of Foulweather Bluff.

A boulder, ⊙ "BOW", bare 2 feet at HW, was found outside the one fathom curve 110 meters off the HW line on the east side of Tala Pt.

A sunken rock was found outside the one fathom curve off Olele Pt. 130 meters ESE of ⊙ "IN".

Sunken reefs across the channel entering Mats Mats Bay block all but one very narrow passage through which but 1/2 fathom can be safely carried at MLLW.

Currents: Strong currents past Foulweather and Double Bluffs made uniform sounding lines and intervals rather difficult of accomplishment in these areas.

Survey Methods: The inshore soundings were taken from Launch No. 61, which, equipped with a Kitchin rudder gives excellent control of sounding speed. The usual bronze-center hand lead-lines with 10 - 12 pound lead were used. Offshore hydrography was executed by

(#4)
Launch No. 61, and the NATOMA utilizing sounding machines.

Submitted,

R. W. Woodworth

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

APPROVED and FORWARDED

G. C. Jones

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

STATISTICS

Hydrographic Sheet # 4.

Foulweather Bluff
Washington.
1927.

M.V. " NATOMA " .

G.C.Jones, Comdg.

Unit for soundings -- -- -- -- -- -- -- fathoms.

Location of portable automatic tide gauge -- On south face of ferry dock at Port Ludlow -- Lat. 47 - 55.5 ; Long. 122 - 40.8.

Plane of reference - - MLLW - - 5.14 ft. on Port Ludlow staff.
Lowest tide observed - - - - - 2.2 ft. " " " " .
Highest tide observed - - - - 16.0 ft. " " " " .

Statistics - Hydrographic sheet #4. 4711

Date	Letter	Vol.	Positions	Soundings	Miles, stat.	Vessel
June 20, 1927.	a	1	103	298	8.3	Lch. #4.
" 21 "	b	"	144	433	14.5	"
" 22 "	c	"	78	301	8.9	"
" " "	"	2	89	187	9.5	"
" 23 "	d	"	165	458	18.8	"
" 24 "	e	"	93	166	8.0	"
July 13 "	f	3	143	410	13.5	"
" 15 "	g	"	81	128	8.6	"
" 18 "	h	"	130	254	14.0	"
" 19 "	j	"	85	94	9.0	"
" 22 "	k	"	57	57	6.0	"
June 23 "	A	1	94	94	23.0	Natoma
" 27 "	B	"	151	163	29.7	"
" 28 "	C	"	66	66	10.7	"
" 29 "	D	"	60	60	8.9	"
" " "	"	2	76	76	13.0	"
July 1 "	E	"	63	63	12.0	"
" 25 "	F	"	42	42	7.2	"
" 26 "	G	"	68	68	6.9	"
	Totals - - -		1788	3418	230.5	

January 31, 1928.

Division of Hydrography and Topography:

Division of Charts:

Tide reducers are approved in
6 volumes of sounding records for

HYDROGRAPHIC SHEET 4711

Locality: HOOD CANAL, WASHINGTON.

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

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.

Section of Field Records.

Report on Sheet No. 4711 Surveyed in June 20 July 26, 1927

Chief of Party - G.C. Jones.
Surveyed by - O.S. Reading, G.C. Jones.
Protracted by - R.H. Woodworth
Soundings plotted by - R.H. Woodworth
Verified & Inked by - D.R. Rounds.

1. The records conform to the requirements of the General Instructions, with the exception that no courses were recorded.
2. The plan and character of the development fulfill the requirements of the General Instructions.
3. The sounding line crossings are adequate.
4. The usual depth curves can be completely drawn.
5. The field plotting was completed to the extent prescribed in the General Instructions.

Total no. of positions - 1788

no. of positions checked - 892.

no. of positions corrected 18.

no. of soundings 3418.

6. The office draftsman did not have to do over any of the drafting done by the field party.

7. The character and scope of the surveying was good and field drafting very good.

Respectfully submitted,

D. R. Rounds.

IN REPLY ADDRESS THE DIRECTOR
U. S. COAST AND GEODETIC SURVEY
AND NOT THE SIGNER OF THIS LETTER

AND REFER TO No. 11-DRM

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

WASHINGTON April 28, 1928.

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4711

Puget Sound - Oak Bay to Point No Point

Surveyed in 1927

Chief of Party, G. C. Jones.

Surveyed by G. C. J. and O. S. Reading.

Protracted by R. W. Woodworth.

Soundings plotted by R. W. W.

Verified and inked by D. R. Rounds.

1. The records conform to the requirements of the General Instructions except for the lack of remarks as to position of beginning and ending of lines. In a few instances, especially the first day's launch work, the times of soundings were recorded incorrectly, making it impossible to plot the soundings with any certainty.

2. The plan and character of the development fulfill the requirements of the General Instructions.

3. The plan and extent of the development satisfy the specific instructions.

4. The usual depth curves can be completely drawn.

5. The field plotting was completed to the extent prescribed in the General Instructions except that only every fifth position was numbered, making it very difficult for the reviewer to follow the work.

6. Eighteen positions were corrected by the verifier.

7. Chart No. 6450 shows a rock 250 meters offshore at the eastern end of Foulweather Bluff. The descriptive report states that this rock was found to be only 50 meters offshore, and that it was thoroughly searched for in its charted position.

This rock was located in 1885 by the party of Lieut. C. T. Forse, on Hyd. Sheet No. 1729. It was located by sextant fix at a time when it was 1 foot out of water. It is described as being 4 feet out of water at low tide. The party of J. S. Lawson in 1875 (sheet 1338a) also found a rock about 150 meters offshore but its location is uncertain, being located by a sounding line which ran 8 minutes between fixes.

See Supplemental Review attached hereto. A.L.S.

8. There is a satisfactory junction with H. 4688 on the west.

The junction with sheet No. 4712 to the south should be taken up with the review of that sheet.

9. The work agrees well with the old surveys with the exception of the rock noted above.

10. In one place the soundings as plotted by time show a minus sounding outside of the small wharf one mile west of Point No Point. Soundings by the ship and one sounding by the launch at the corner of the wharf show this to be in error, probably due to lack of uniform speed of the launch. This should have been more thoroughly investigated.

The low water line extends almost to the face of the dock. The bottom then drops off very steeply. [illegible]

11. Further surveying is required to confirm or disprove the rock off Foulweather Bluff.

12. Character and scope of the surveying, very good. Field drafting, very good.

13. Reviewed by M. O. Witherbee, April 16, 1928.

~~Sheet inspected by A. L. Shalowitz.~~ See attached Supplemental Review.

The 14 fm spot at φ 47°58.6' λ 122°33.7 1/2 mile W. of N. Doolle [illegible] may possibly be a 10 fathom error in reading sounding sheave. Should be investigated when revision is continued & minimized. [illegible]

This 14 fm. investigated & disproved by H8812 (1966) [illegible]

Approved:

[signature]

Chief, Section of Field Records (Charts)

[signature]

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

Two additional rocks awash in the southern part of the Klass Rocks group, which are shown on T. 537, 540 and 1304, probably exist, and should be charted.

E. P. E. May 19, 1928

IN REPLY ADDRESS THE DIRECTOR
U. S. COAST AND GEODETIC SURVEY
AND NOT THE SIGNER OF THIS LETTER

AND REFER TO No. 11-DRM

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

WASHINGTON April 27, 1928.

Supplemental Review to H.4711

Memorandum re - Rock off Cape Foulweather

The following is a digest of the information bearing on the charted rock awash about 250 meters northeast of Cape Foulweather:

H. 1729 (1885 work).

The rock was first charted from this sheet. It was located on Oct. 3, 1885 at a time when the tide was 3.0 feet high. It was then 1 foot out of water so that at the plane of reference it was bare about 4 feet. The locus of the right angle passes through △ Foul and if an error of about 2° was made in the left angle the position would plot close to where the latest survey (H. 4711) and the old survey H. 1338[a] locate a rock bare about the same amount at mean lower low water. The right angle being beyond the range of the sextant for a single reading (159° 47') it would seem that this angle was more likely to be in error than the left angle. However, the fact that the record describes it as a "rock just off shore of signal" (presumably △ Foul) precludes any possibility of an error in the right angle.

H. 1729 (1886 work).

On May 17, 1886, with a 1.0 foot tide (pos. 26 g, brown) a sounding of 9 feet (8 feet reduced) was obtained on a boulder about 30 meters southeast of the position of the above rock. If the 1885 work was correct, the rock at this time should have been about 3 feet out of water and it is hardly conceivable that the surveyor could have missed it, being so short a distance away. Of course there is always a possibility that one of the angles for this position is in error, and while the locus of the left angle passes close to the positions of the rocks located close to shore on H. 1338[a] and H. 4711 (both mentioned below), there is no reason to question the accuracy of the right angle and the position as recorded must be accepted.

8 ft. depth investigated in FE. 1947

At pos. 27 g on the same day a rock was located near the western end of Cape Foulweather, bare 3 1/2 feet at mean lower low water. This rock plots within 50 meters of a rock located on H. 4711 which just bares at mean lower low water.

H. 1338[a]

On Oct. 6, 1875 (pos. 36 y to end of line at △ Foul) with a 7.4 foot tide a rock with 3 feet on it at the time was located about 70 meters northeast of △ Foul. This reduces to -4 feet at mean lower low water. Just inside of this rock a sounding of 3 feet at mean lower low water was obtained. It should be noted that the depth on the rock and the depth just inside agree with that found on the 1885 survey when the charted rock was first located. A note in the record at the time the rock was found says "6 feet inside" which reduced to the plane of reference would be 3 feet.

Attention is called to the fact that owing to an erroneous plotting of pos. 36 y on H. 1338[a] (about 180 meters north of where it should be) the location of the above rock is erroneously shown on the smooth sheet. This dispels the supposition that two independent parties located the rock in question in slightly different positions. The correct plotting of the rock on H. 1338[a] agrees closely in location and depth with a rock found on H. 4711 (pos. 1 e).

H. 4711

On June 21, 1927 a sounding line (125 b to 128 b) was run almost directly over the charted rock (from the 1885 survey) with a 1.5 foot tide but no indication of a rock was noted. If the 1885 location was correct the rock at this time should have been bare 2 1/2 feet and it would have been impossible for the surveyor to overlook it. Another line was run close to the position of the rock (114 b to 115 b) with a 1 foot tide and no indication of a rock noted. The least depth obtained at the position of the rock was 4 1/6 fathoms.

From the above discussion of the details the following deductions are possible:

1. It is not likely that a rock bare 4 feet at mean lower low water exists in the position as now charted.

(This is based on the fact that two parties were in close proximity to the rock at a time when the tide was 1 foot high and the rock should have been exposed 3 feet.)

2. The charted rock is probably located close to △ Foul in the position of the rock awash shown on H. 4711.

(This is based on the fact that the 1875 survey (H. 1338[a]) and the 1927 survey (H. 4711) both locate a rock bare 4 feet at mean lower low water close to △ Foul and this falls close to the

locus of the right angle of the charted rock. Furthermore, the notation in the record (1885 work) that the "rock is just offshore of signal" would hardly describe a rock 250 meters offshore as now charted. And still further, the depth of water inside the rock found on H. 1338[a] agrees with the notation given in the record of the 1885 survey.)

3. The rock with 8 feet on it at mean lower low water found on H. 1729 (1886 work) is not disproved by the new survey (H. 4711), as it is very likely of small extent and could be easily missed on the sounding lines.

4. It is reasonably certain that the charted rock does not exist in the location shown, and it is therefore recommended that on the next edition of chart 6450 the rock awash be replaced by the 8 foot sounding mentioned above.

Attached to this report is a tracing showing the plotting of all the work bearing on the above discussion.

A. L. Shalowitz

A. L. Shalowitz

Approved:

A. J. Giacomini

Chief, Section of Field Records (Charts)

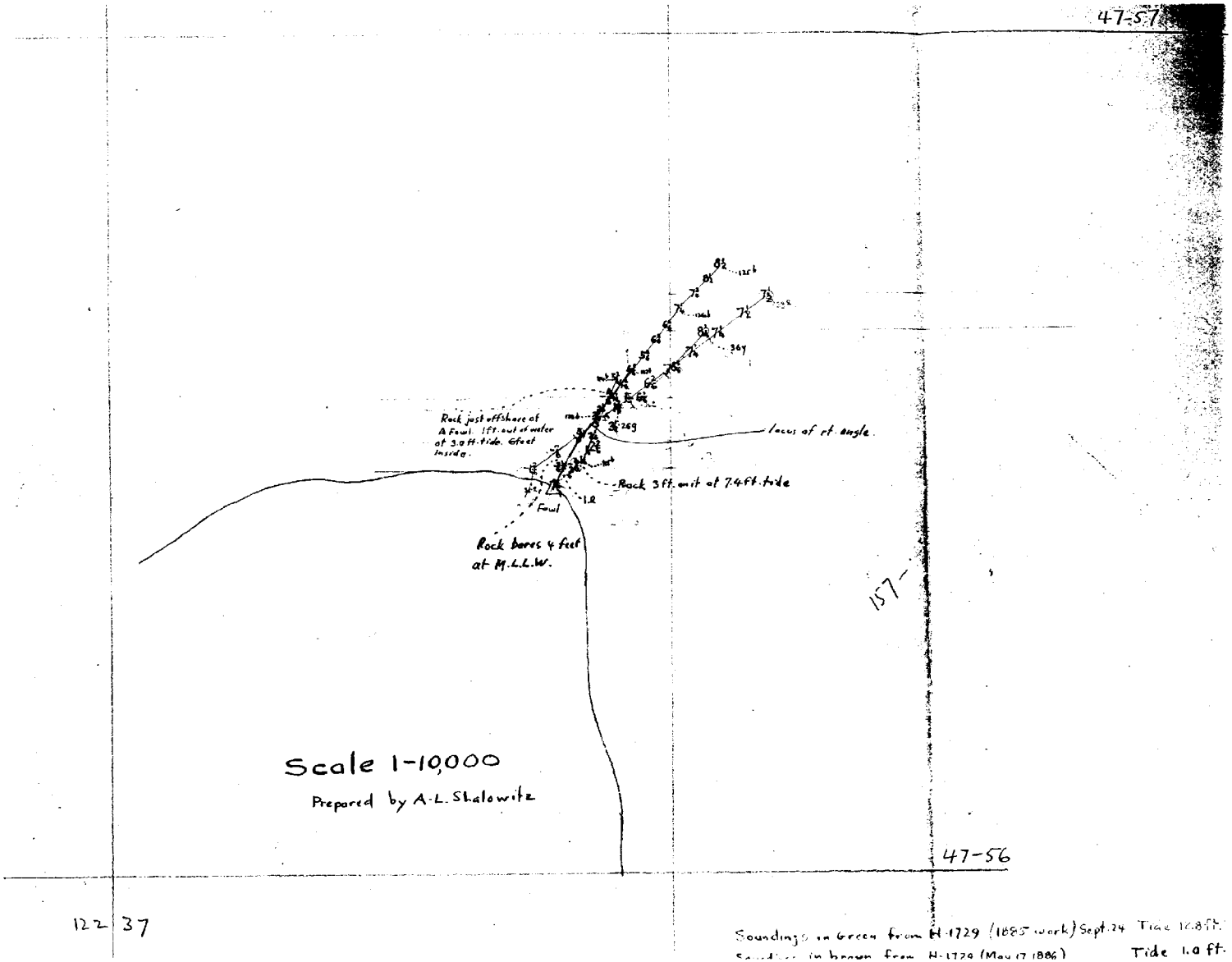
L. O. Colbert

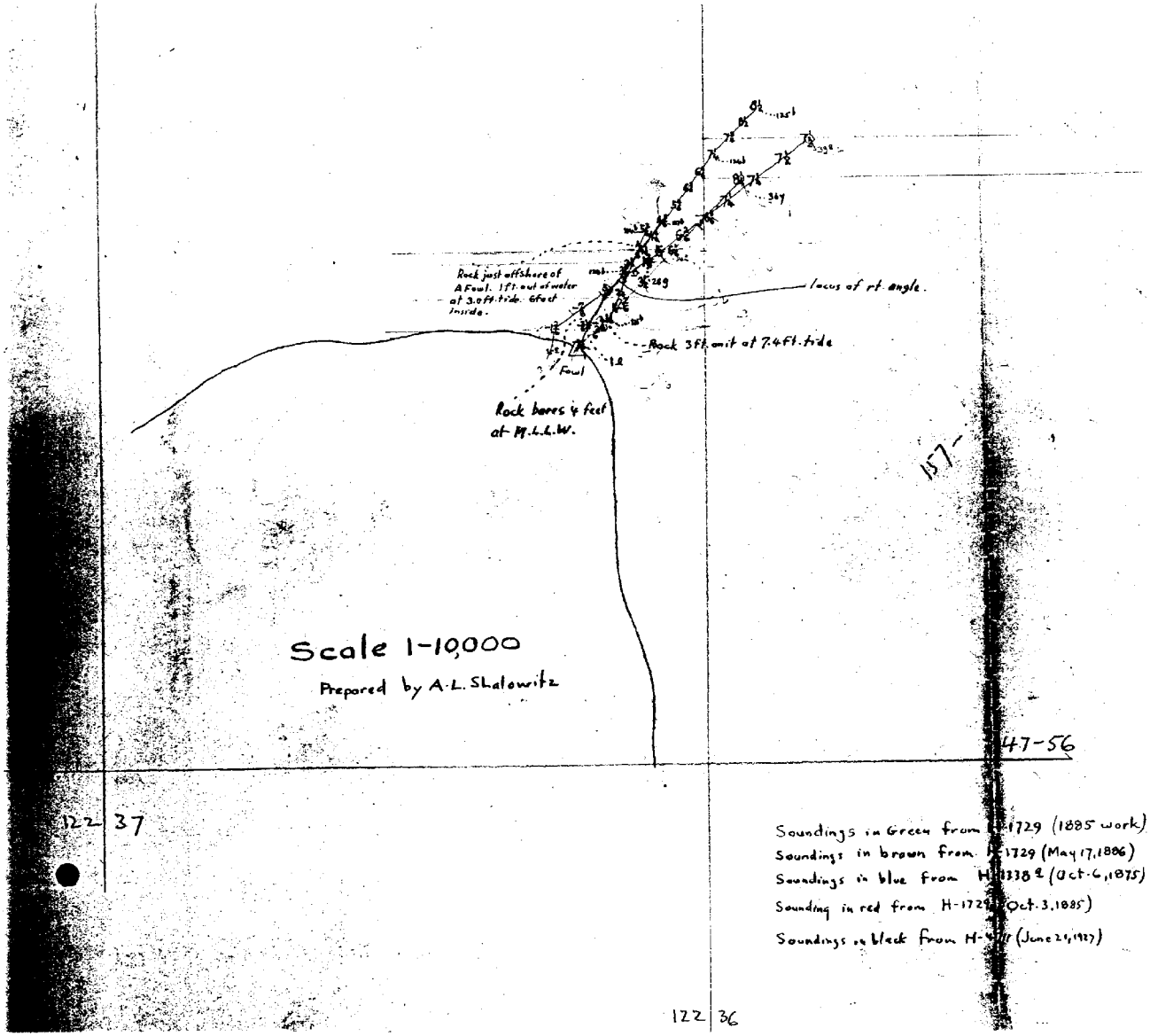
Chief, Section of Field Work (H. & T.)

The rock, near Signal Foul discussed above is prominent and used as a landmark in sounding Foulweather Bluff. A special lookout was kept while sounding with the launch in the vicinity and it is impossible that a rock bare at low water to exist 250 meters offshore. The lookout was so good that it is considered improbable that the eight foot rock exists, particularly as such boulders are usually marked by kelp. Nothing was known of this 8 ft. sounding when the survey was made however and it is possible that such a rock exists and more work will be required in the vicinity

O Reading

bare 3½ feet


47-57
Rock just offshore of A Fowl. 1ft. out of water at 3.0 ft. tide. 6 feet inside.
Focus of rt. angle.
Rock 3ft. out at 7.4ft. tide
Fowl
Rock bares 4 feet at M.L.L.W.
157-
Scale 1-10,000
Prepared by A.L. Shalowitz
47-56
122 37
Soundings in Green from H-1729 (1885 work) Sept. 24 Tide 10.8 ft.
Soundings in brown from H-1729 (May 17 1886) Tide 1.0 ft.



Soundings in Green from H-1729 (1885 work) Sept. 24 Tide 1.8 ft.
Soundings in brown from H-1729 (May 17, 1886) Tide 1.0 ft.
Soundings in blue from H-1338 & (Oct. 6, 1875) Tide 7.4 ft.
Sounding in red from H-1729 (Oct. 3, 1885) Tide 3.0 ft.
Soundings in black from H-9[illegible] (June 24, 1927) Tide 1.0 and 1.5 ft.

Form 537
11—5812

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO. 4711

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. 4

REGISTER NO. 4711

State Washington

General locality ~~Admiralty Inlet~~ Puget Sound

Locality ~~Foulweather Bluff~~ Oak Bay to Point No Point

Scale 1 : 10,000 Date of survey June 20 - July 26, 1927

Vessel Natoma

Chief of Party G.C.Jones

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

Protracted by R.W.Woodworth

Soundings penciled by R.W.Woodworth

Soundings in fathoms ~~feet~~

Plane of reference MLLW

Subdivision of wire dragged areas by

Inked by D. R. Rounds

Verified by D. R. Rounds.

Instructions dated May 3rd, 192 7

Remarks:

GPO

NAUTICAL CHARTS BRANCH

SURVEY NO. H-4711

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
8/30/45	6421	[illegible]	~~Before~~ After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After. Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			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.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
NORTHWESTERN DISTRICT HEADQUARTERS
400 INSURANCE BUILDING
SEATTLE 4, WASH.

B-4
JS/et

24 December 1946

Commander, 13th Coast Guard District
Seattle, Washington

Subject: Foulweather Bluff; survey of rock; request for

Reference: CG-626

Receipt is acknowledged of your letter of 19 December 1946.

The Commanding Officer of the Coast and Geodetic Survey Ship SURVEYOR, presently engaged on surveys in Hood Canal, has been instructed to make a detailed survey of the charted 8-foot rock, approximately 250 meters northeasterly from Foulweather Bluff, as indicated on chart No. 6421.

For your information the existence of this 8-foot sounding has not been definitely established. The latest survey of that area failed to reveal this rock; however, pending a more detailed investigation, this reported rock has not been removed from the chart.

Very truly yours,

Jack Senior
Supervisor, NW District
U.S. Coast & Geodetic Survey

c.c. Director, USC&GS

839

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
NORTHWESTERN DISTRICT HEADQUARTERS
400 INSURANCE BUILDING
SEATTLE 4, WASH.

A-21
JS/et

24 December 1946.

To: Commanding Officer
U.S.C. & G.S.S. SURVEYOR
Seattle, Wash.

Subject: Foulweather Bluff; survey of 8-ft. rock.

Under date of 19 December 1946, a request has been received from the Commander, 13th Coast Guard District, for a detailed survey of the rock which is submerged about 8 feet approximately 250 meters northeasterly from Foulweather Bluff.

The following is quoted from the District Coast Guard Officer's letter:

> "This request is made because the Masters and Pilots of the Ferries operating on the Edmonds-Port Ludlow Route have petitioned the Coast Guard to establish a fixed aid to navigation located off the N.E. Point of Foulweather Bluff, in lieu of the present lighted Bell Buoy that is deemed inadequate. A survey is necessary to properly design a structure and make an estimate of the cost."

The investigation of this rock, which was not satisfactorily disproved by H-4711, was covered in your instructions for field work dated 29 Oct. 1946. You will please give this work priority to assure completion at an early date.

Jack Senior
Supervisor, NW District
U.S. Coast & Geodetic Survey

c.c. Director, USC&GS