

# FE59

Diagram No. 6450-2

NOAA FORM 76-35A

U.S. DEPARTMENT OF COMMERCE  
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION  
NATIONAL OCEAN SURVEY

## DESCRIPTIVE REPORT (HYDROGRAPHIC)

Type of Survey ... Field Examination .....  
Field No. .... SU-05147 .....  
Office No. .... FE-59 .....

### LOCALITY

State ..... Washington .....  
General Locality ... Puget Sound .....  
Locality ..... Foulweather Bluff .....

19 47

CHIEF OF PARTY  
T.B. Reed

### LIBRARY & ARCHIVES

DATE ..... April 8, 1947 .....

☆ U.S. GOV. PRINTING OFFICE: 1976-669-441

NOTE: A new system for registering Field Examinations (FE's) was established in 1980. All FE's are now consecutively numbered as shown hereon. The date shown in the new format is the actual date of survey. This material was previously registered as:

FE No.1 1947

FE59



# FENo.1 1947

FE-59

FENo.1  
1947

Diag'd. on Diag. Ch. No. 6450-2

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

## DESCRIPTIVE REPORT

Type of Survey ..... Hydrographic

Field No. SU-05147 Office No. ....

### LOCALITY

State..... Washington

General locality..... Puget Sound

Locality..... Foulweather Bluff

1947

CHIEF OF PARTY

Thos. B. Reed

SURVEYOR

LIBRARY & ARCHIVES

DATE..... APR 8 1947



APR 8 1947

Form 537  
(Ed. Nov. 1941)

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.

REGISTER NO. ~~FE~~ - No. 1 (1947)

Field No. SU 05147

State Washington

General locality Puget Sound

Locality Foulweather Bluff

Scale 1:5,000 Date of survey 22 January 1947

Instructions dated 29 October 1946

Vessel SURVEYOR, Launch No. 2

Chief of party T. B. Reed

Surveyed by K. B. Jeffers

Soundings taken by fathometer, graphic recorder, ~~hand lead, voice~~

Protracted by C. N. Hillman

Soundings penciled by C. N. Hillman

Soundings in ~~fathoms~~ feet at ~~MLW~~ MLLW

REMARKS: Special survey to investigate 8 ft. spot shown on chart No. 6421.

Plotted in the Seattle Processing Office

DESCRIPTIVE REPORT TO ACCOMPANY  
HYDROGRAPHIC SHEET SU-05147  
PUGET SOUND, WASHINGTON  
PROJECT CS-314  
1947

SCALE OF SURVEY: 1:5000  
CHIEF OF PARTY: T. B. Reed, Commanding SHIP SURVEYOR.  
FIELD WORK BY: K. B. Jeffers and H. D. Reed

A. PROJECT:

Authority for this survey is contained in the supplemental instructions for Project CS-314 issued by the Supervisor, Northwestern District under date of October 29, 1946. The survey was limited to an investigation of the 8 foot sounding shown on Chart No. 6421, and was made at the request of the U. S. Coast Guard.

B. SURVEY LIMITS AND DATES:

The survey covers the area surrounding the charted 8 foot sounding off the northeast point of Foulweather Bluff. The field work was done on January 22, 1947.

C. VESSEL AND EQUIPMENT:

Field work was done by a launch party operating from the SHIP SURVEYOR. All soundings were obtained with an 808 type fathometer number 47-S

D. TIDE AND CURRENT STATIONS:

Tide data for the reduction of soundings were obtained from the Washington Office based on recorded tides at the Seattle standard station.

No current stations were occupied.

E. SMOOTH SHEET:

The smooth sheet will be constructed and the hydrography plotted by personnel in the Seattle Processing Office.

*Tracing attached to this report serves as smooth sheet.*

F. CONTROL STATIONS:

The control is based on FOULWEATHER 1921 and the azimuth to Point No Point Lighthouse.



G. TOPOGRAPHY:

The signals were located on the boat sheet by plane table methods. The triangulation station FOULWEATHER<sup>(1921)</sup> was not recovered, however both reference marks were recovered and reference mark No. 1 was used as a starting point. The shore line was not plotted.

H. SOUNDINGS:

Soundings were recorded in feet using 808 recorder No. 47-S. Standard methods were used.

I. CONTROL OF HYDROGRAPHY:

The sounding lines were controlled by sextant fixes on shore signals.

J. ADEQUACY OF SURVEY:

The survey is considered adequate to disprove the existence of the 8 foot sounding shown on Chart No. 6421.

K. CROSSINGS:

The crossings are satisfactory.

L. COMPARISON WITH PREVIOUS SURVEYS:

No comparison was made with previous surveys except for the above noted 8 foot sounding. ( J )

N. DANGERS AND SHOALS:

No additional shoals were found.

O. COAST PILOT INFORMATION:

None

P. AIDS TO NAVIGATION:

Lighted bell buoy No. 2 is correctly charted and is far enough offshore to provide adequate clearance of all dangers.

Q. LANDMARKS FOR CHARTS:

None



TABULATION OF APPLICABLE DATA:

Velocity correction sheet.

List of signals.

Tidal data sheet.

Respectfully submitted,

*Karl B. Jeffers*

Karl B. Jeffers,  
Lt. Comdr., C. & G. Survey.

Approved:

*A. P. Ratti*

A. P. Ratti,  
Commander, C. & G. Survey  
Commanding SHIP SURVEYOR



SU-05147

TIDAL DATA SECRET

Tide reducers were furnished by the Washington Office and are based on the standard gage records at Seattle corrected for time and range. A copy of the Director's letter is attached hereto.



SHEET No. SU-05147

List of Signals

Name

Origin of Station

ACE

All signals located

BAG

On the boat sheet by  
plane table methods.

COB

DAN

COPY

Department of Commerce  
U.S.C. & G. Survey  
Washington 25

36 - mr

March 7, 1947

TO: The Commanding Officer,  
U.S.C. & G. Ship SURVEYOR  
400 Insurance Bldg.  
Seattle 4, Washington

SUBJECT: Tide data, Washington

Tide reducers for soundings made on January 22, 1947 off foulweather Bluff requested in your letter of March 3, 1947 are as follows: 6.3 Feet at 11:00; 6.2 feet at 12:00; 6.7 feet at 13:00; 7.3 feet at 14:00. Times are Pacific Standard ( 120th Meridian) and heights are refered directly to mean lower low water. These reducers are based on tide record for Seattle and necessary allowances have been made for time and range differences.

/S/ J.H. Hawley  
Acting Director.

SU 05147

Foulweather Bluff, Washington

Examination of Shoal

The plotted positions were checked on the boat sheet.

The positions, signals and projection were traced on linen.

Reduced soundings were plotted on the tracing.

Soundings are in feet.

Respectfully submitted,



Edgar E. Smith  
Cartographic Engineer  
Seattle Processing Office



NAUTICAL CHART BRANCH

REVIEW OF FIELD EXAMINATION NO. 1 1947

1. This field examination was made for the purpose of investigating the  $9\frac{1}{2}$ -ft. sounding (8 charted on chart 6421) in lat.  $47^{\circ} 56.54'$ , long.  $122^{\circ} 36.08'$ , which originates with H-1729 (1885-86). The  $9\frac{1}{2}$ -ft. is incorrectly shown as 8 ft. on the hydrographic sheet. A correction of  $1\frac{1}{2}$  ft. must be added to the 8 (reduction to MLLW in accordance with the tidal note) thus making the correct depth  $9\frac{1}{2}$  ft. This sounding is the least depth on a submerged boulder located by a detached position. No check angle was taken on the fix.
2. The development in the immediate vicinity of the  $9\frac{1}{2}$  ft. (8 charted) is adequate to disprove the existence of a boulder at that location, and in concurrence with the Descriptive Report and Chart Letter 81 (1947), it is recommended that the sounding be removed from the chart.
3. The close development disproving the  $9\frac{1}{2}$  ft. (8 charted) on the present examination covers only a small area, however, similar dangers could still remain undiscovered farther inshore where there are open areas of 12 to 20 meters between sounding lines. Indications of submerged boulders in this vicinity are recorded on the fathograms of the present investigation.

Inspected by:

H. W. Murray

Reviewed by:

R. H. Carstens

June 2, 1947

*L.C.W.  
H.W.M.*

## TIDE NOTE FOR HYDROGRAPHIC SHEET

April 11, 1947

~~DIVISION OF HYDROGRAPHY AND TOPOGRAPHY~~

Division of Charts: H. W. MURRAY

Plane of reference approved in

1 volume of sounding records for

F. E. 1 (1947); (S-2471)

### HYDROGRAPHIC SHEET

Locality - Foul Weather Bay, Puget Sound, Washington

Chief of Party: T. B. Reed in 1947

Plane of reference is mean lower low water, reading

7.4 ft. on tide staff at Seattle, Washington

23.0 ft. below B. M. 3 (1927)

Allowance made for range of tide at place of soundings. (Ratio .8)

Height of mean high water above plane of reference is 10.2 feet.

Condition of records satisfactory except as noted below:

*E. C. McKay*  
*Section*

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

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. ~~FE~~ No. 1 (1947)

Records accompanying survey:

Boat sheets ..1..; sounding vols. .1...; wire drag vols. ....;  
 bomb vols. ....; graphic recorder rolls .1...;  
 special reports, etc. ....  
 .....

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

Number of positions on sheet	.....	56
Number of positions checked	..1...	
Number of positions revised	..0...	
Number of soundings revised (refers to depth only)	.....	5
Number of soundings erroneously spaced	..0...	
Number of signals erroneously plotted or transferred	.....	0
Topographic details	Time	.....
Junctions	Time	..0...
Verification of soundings from graphic record	Time	..1/2 hr.

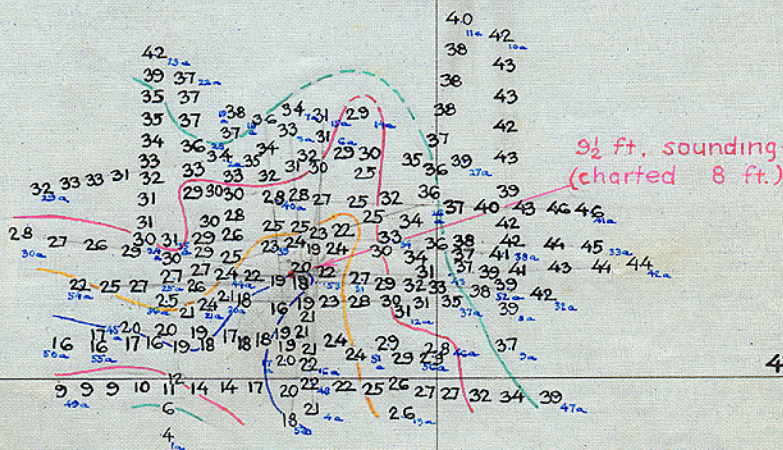
Verification by R. D. Goodrich Total time 3 hrs. Date 5/21/47

Reviewed by R. H. Carstens Time .16 hr. Date 5/23/47



36' 30"

122° 36' 00"



9 1/2 ft. sounding (charted 8 ft.)

47° 56' 30"

47° 56' 30"

○ Dan

△ Cob

FOULWEATHER, 1921

○ Bag

○ Ace

TO PT. NO POINT LIGHTHOUSE  
298° 28' 57.09 (INVERSE COMP.)

SU 05147

**FOULWEATHER BLUFF**

PUGET SOUND, WASH.

EXAMINATION OF SHOAL BY  
PARTY OF SHIP 'SURVEYOR'  
JAN. 22, 1947 - SCALE 1/5,000  
SOUNDINGS IN FEET AT MLLW

36' 30"

122° 36' 00"



