4692

Form 504

DEPARTMENT OF COMMERCE

U.S. COAST AND GEODETIC SURVEY

State: S.W. Alaska

11 6813

C. & G. SURV.
L. & A.
DEC
Acc. No.

DESCRIPTIVE REPORT.

Hydro. Sheet No. K 4692

LOCALITY:

Port Bainbridge

Prince William Sound

Add'l Work by A.M. Sobieralski
1934
1937

CHIEF OF PARTY:

T.P. Lukens

4692

STATISTICS FOR HYDROGRAPHIC SHEET

PORT BAINBRIDGE

Date	Day	Vol.	Positions	Soundings	Miles(Sta.)	Boat	Remarks
June 10	a	1	R E J E C T E D				
11	b	1	40	66	12.4	M.S.2967	
13	c	1	74	128	24.3	"	
15	d	1	50	89	17.1	"	
16	e	1	95	193	21.1	"	
17	f	2	86	144	21.1	"	
21	g	2	44	107	12.2	"	
22	h	2	30	68	8.1	"	
23	j	2	66	110	22.1	"	
24	k	2-3	120	261	26.9	"	
27	m	3	62	142	9.5	"	
28	n	3-4	125	276	27.1	"	
July 1	p	4	88	182	19.5	"	
7	q	4	88	164	23.8	"	
8	r	4	80	139	18.9	"	
9	s	5	28	71	6.2	"	
11	t	5	116	270	20.0	"	
26	u	5	27	50	4.0	"	
TOTALS			1219	2460	294.3		

DESCRIPTIVE REPORT
to accompany

HYDROGRAPHIC SHEET)(PORT BAINBRIDGE.

ooOOoo

Steamer SURVEYOR

R. R. Lukens,
Chief of Party.

Work executed under Director's instructions dated
February 3, 1927.

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GENERAL DESCRIPTION: With the exception of a few reconnaissance lines, no hydrography had been done in Port Bainbridge previous to that shown on this sheet. On the ~~north~~ south the work joins some ship hydrography of an old survey and launch hydrography completed by this party - Sheet "C" - earlier in the season. The main arm of Port Bainbridge was developed by a system of parallel lines spaced 600 meters and extending laterally across the channel. The bays and smaller arms were developed by 300, 200 and 100 meter lines, depending upon their importance as anchorages or possible later cannery sites.

BAYS: Hogg Bay is the largest and most frequently used, and, with the exception of the rock awash shown 460 meters southwest of signal LUT, is free from dangers to navigation and offers perfect protection in any weather. There is ample swinging room and ~~good~~ fair holding ground, in 24 fathoms, about 500 meters due west from the southernmost of the two islands at the head of the bay. Small fishing boats generally use the head of the north arm which is almost land-locked and offers perfect protection and good holding ground. Occasionally the smaller boats anchor in three fathoms back of the twin islands at the head of the bay.

During the time the hydrography was being executed a camp was established at signal TENT and a mooring placed behind the islands for the sounding launch and HELIANTHUS.

A shoal area, 900 meters south of signal RET was developed but no less than 14 fathoms was found. With the exception of the two areas heretofore mentioned Hogg Bay can be considered free from dangers to navigation.

Swanson Bay, while much narrower and more regular in shape than Hogg Bay, is about the same general depth. The bottom is quite regular, shoaling gradually toward the head of the bay. There are no off-lying rocks of any kind and the bay as a whole has few features of naviga-

tional importance. Fishermen sometimes anchor at the head of the bay but this is too deep for most of them who anchor in 6 to 9 fathoms, soft bottom, about 300 meters due east of signal BIL.

Auk Bay, on the west side of Port Bainbridge is frequently used by local fishermen as an anchorage. With the exception of a rock, bare at low water, 140 meters south of signal "fun", there are no dangers to navigation; thus offering the nearest good anchorage for boats off Cape Puget. The SURVEYOR anchored many times in 19 fathoms, mud bottom, about 360 meters north of signal PUG. In very bad weather they use the small cove on the south near the mouth of the bay. There is a gravel beach here with plenty of fresh water.

Bainbridge Passage is as yet unsurveyed beyond what is shown on this sheet.

At present the north end and west side of Port Bainbridge is closed to fishing and few boats have cause to use the section north of the Passage. The east arm at the head of the bay has a quite uniform bottom and is free from menaces except for the one rock, bare at low water, which is shown 420 meters east by north from signal AL.

The west arm which is almost a lagoon due to the shallow entrance is free from dangers to navigation or obstructions of any sort with the exception of the group of small islands at the head. This arm is seldom, if ever, used because a gravel bar blocks the entrance and gives only (2-1/3) fathoms clearance in the channel close to the east side. 2 fms CRM

South-southeast of station BRID is a jagged irregular bank, rock bottom, having a least depth of 11 fathoms. The development showed this to be a shelf-like plateau extending out from the beach, then dropping steeply into 140 fathoms; the outer edge of the shelf being slightly shoaler.

OUTLYING DANGERS: With the exception of Procession Rocks which are about 70 feet high and well defined and the 15 foot rock at signal PUG, there are no outlying dangers which have not been taken up under the heading "Bays".

INSHORE DANGERS: Consisting mainly of small reefs and detached bowlders close to the beach and are all plainly shown on the sheet with the proper symbol and need no further explanation. The more important ones were taken up under the heading "Bays".

TIDE RIPS AND CURRENTS: The Currents in Port Bainbridge are purely tidal, flowing north into the bay and east through the passage, on a flood tide, and reversing on the ebb. In the main part of the bay the flow is moderate with no marked effect except small swirls around the points at the mouths of Swanson and Hogg Bays.

There is, according to local information, a maximum flood current of from 6 to 8 knots through Bainbridge Passage but this has never been checked up.

LANDMARKS FOR CHARTS: See topographic sheet and the accompanying descriptive report.

ANCHORAGES: During the season the SURVEYOR anchored several times in both Hogg Bay and Auk Bay. The anchorage in Hogg Bay is in 24 fathoms, ~~good~~ fair holding ground, about 350 meters west of the two islands (signals RIC and GAGE) at the head of the bay. The other anchorage in Auk Bay is in 19 fathoms about 380 meters north by west from signal PUS. This anchorage can be located by being directly opposite a short stretch of shingle beach west of signal PUS.

Fishing boats and other small craft use various other anchorages some of which are listed below:

In Auk Bay, in the small bight - 400 meters southeast of signal ABLE, 6 to 10 fathoms, gravel bottom.

Swanson Bay, 300 meters east of signal BIL, Sand and gravel bottom, 3 to 10 fathoms.

Hogg Bay, behind the twin islands at the head of the bay in 2-1/2 fathoms, mud bottom; also, at the head of the north arm 3 to 10 fathoms, mud bottom, 340 meters south southwest of signal CAB. The latter anchorage is recommended because of more water, plenty of swinging room and absolute protection.

SURVEY METHODS: The sounding was done with Motor Sailer No.2967, rigged with a sounding machine geared to the engine. The deeper soundings in the center of the Port were taken with an 18 pound lead. The rest with a 16 pound lead, except in the shoal water at the head of the bays, etc., where hand lead was used. The control was regular three point sextant fixes on topographic and triangulation signals. Crew was composed of two officers and four men.

EXISTING GEOGRAPHIC NAMES:

Port Bainbridge.
Port Waters.
Bainbridge Passage.
Hogg Bay.
Swanson Bay.
Point Pyke.
Procession Rocks.

Names suggested by Survey Party:

Auk Bay, as applied to the bay on the west side of Port Bainbridge, in latitude 60 01.

Respectfully submitted:

Samuel B. Grenell

Samuel B. Grenell,
Jr. H.& G.Engr.

Approved and forwarded:

R. R. Lukens

R. R. Lukens, H.& G.Engr.
Chief of Party.

Note:

The anchorage in Hogg Bay affords only fair holding ground. The bottom is generally hard with patches of sand and mud. The SURVEYOR anchored here a number of times, but the anchorage was not tested under storm conditions. The bay on the west side of Port Bainbridge was named AUK Bay by the survey party- that being considered a short easy name. An automatic tide gauge was established in Hogg Bay and the plane computed by simultaneous obs. with Seward.

R. R. Lukens

Copy for Records Section. January 13,1928.

Division of Hydrography and Topography:

Division of Charts:

Tide reducers are approved in
5 volumes of sounding records for

HYDROGRAPHIC SHEET 4692

Locality: PORT BAINBRIDGE, S.W.ALASKA.

Chief of Party: R. R. Lukens, 1927.
Plane of reference is M L L W
2.4 ft. on tide staff at Seward
5.2 " " " " " Hogg Bay

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.

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

August 28, 1928.

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4692

Port Bainbridge, Prince William Sound, Southwest Alaska

Surveyed in 1927

Instructions dated February 3, 1927

Chief of Party, R. R. Lukens.

Surveyed by S. B. Grenell.

Protracted and soundings plotted by H. O. Westby.

Verified and inked by J. T. Jarman.

1. The records conform to the requirements of the General Instructions.

2. The plan and character of 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.

6. The office draftsman noted and corrected a number of errors in plotting as follows:

   a. Generally, the time interval was regular, but in cases to the contrary, the field draftsman continued to space the soundings as though the interval was regular.

   b. The errors listed below are actual examples of several that were noted and corrected by the office draftsman:

As it was plotted by field draftsman	As it should have plotted
17 79	17 79
6½	14
14	8½
5½ 69	5½ 69
2·2/6 116 t	2·2/6 116 t
14	3 2/6
9	9
3 2/6	14
17 115 t	17 115 t

Several minor errors in the shore line of Hogg Bay were discovered and corrected.

Statistics on the sheet follow:

No. of positions		1219
" " "	checked	404
" " "	in error	18
" " soundings		2460

Time interval - generally regular

Character of work - generally open.

7. The junction with H. 4694 on the south is satisfactory.

8. Report by J. T. Jarman, February 23, 1928.

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

AND REFER TO No. 11-DFM

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

WASHINGTON August 23, 1928.

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4692

Southwest Alaska - Prince William Sound - Port Bainbridge.

Surveyed by S. B. Grenell.

Chief of Party, R. R. Lukens.

Protracted and soundings plotted by H. O. Westby.

Verified and inked by J. T. Jarman.

1. Original instructions as to hydrography were strictly carried out.

2. The development is adequate. No additional work is necessary.

3. The depth curves for three fathoms and above may be practically completely drawn.

4. The junction with sheet 4694 to the south and east was taken up in the report for that sheet.

5. A few changes in the location of the depth curves were made. The record was changed in three places where it was plainly apparent that the recorder had made an error in time.

6. Inking - good.

7. Reviewed by E. R. McCarthy, March 1, 1928.

Approved:

Chief, Section of Field Records (Charts)

Several areas particularly off Point Pyke, off O'Stamp and other entrance points should have been better developed

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

Form 537
11-5812

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO. 4692

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. K

REGISTER NO. 4692

State S. W. Alaska

General locality Prince William Sound

Locality Port Bainbridge

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

Vessel Surveyor

Chief of Party R.R. Lukens

Surveyed by S.B. Grenell

Protracted by H.O. Westby

Soundings penciled by H.O. Westby

Soundings in fathoms ~~feet~~

Plane of reference M.L.L.W.

Subdivision of wire dragged areas by

Inked by

Verified by

Instructions dated February 3rd, 1927

Remarks:

GPO

4692

Additional work

4692

Additional work

Additional work

Additional work

Form 504
Ed. June, 1928

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
R.S.Patton, *Director*

State: S.W.Alaska

DESCRIPTIVE REPORT

~~Topographic~~ } *Sheet No.* Additional work
Hydrographic }

LOCALITY

Prince William Sound

Hogg Bay Bainbridge Island.

19 34

CHIEF OF PARTY

A.M.Sobieralski.

U. S. GOVERNMENT PRINTING OFFICE: 1928

Form 537
Ed. Sept., 1929

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. H-4692
Additional Work
REGISTER NO.

State Alaska

General locality West of Prince William Sound

Locality Hogg Bay, Bainbridge Island

Scale 1:20,000 Date of survey May 24 & 28, 1934

Vessel Launches WILDCAT and #3 from Str. SURVEYOR

Chief of Party A. M. SOBIERALSKI.

Surveyed by F. B. QUINN AND V. M. GIBBENS

Protracted by F. B. QUINN

Soundings penciled by F. B. QUINN

Soundings in fathoms ~~Feet~~

Plane of reference M. L. L. W.

Subdivision of wire dragged areas by

Inked by

Verified by

Instructions dated See attached letter, 19

Remarks: Soundings taken as additional data for Hydo. Sheet No. H-4692. Shoreline and signals traced from photostat of Topo Sheet No. T-4308. Predicted tides for Kodiak corrected to Hogg Bay were used for reduction of soundings.

U. S. GOVERNMENT PRINTING OFFICE: 1928

DESCRIPTIVE REPORT

ADDITIONAL WORK H-4692

HOGG BAY, PORT BAINBRIDGE

ALASKA.

L.B.P.

On account of a report of a halibut fishing vessel striking an uncharted rock in Hogg Bay, an investigation was made and an uncharted 4/6 fathom spot was found about 200 meters from the south shore.

The first day an erroneous 8 fathom sounding, misled the party and numerous soundings were taken to try to locate the rock in this vicinity. Finally, on the second day, an improvised sweep between a launch and a skiff passed over the spot, definitely disproving it. With this sweep, the shoal was easily located.

The soundings have been reduced to M.L L W by applying predicted tides, using the tables for Kodiak corrected for Hogg Bay. It is suggested that the tide reductions be verified from Seward tide gauge when the records have been received at the office.

While the rock is so close to shore that a careful navigator would have avoided it, the possibility that other fishing boats which frequent these waters might strike it, makes it advisable to publish a notice to mariners, when a correct tide reducer has been obtained.

It is suggested that these soundings be transferred to the original sheet, H-4692.

Respectfully submitted,

A. M. Sobieralski

A. M. SOBIERALSKI,
Commanding, Str. SURVEYOR.

N. to M. 27 - 1934

H. 4692.

Report on additional work by - F. B. Quinn - 1934.

Chief of Party - A. M. Sobieralski.

The work was plotted satisfactorily by F. B. Quinn. The reducer used for reduction of soundings was that of Kodiak. By use of the comparison with Seward Tide Gauge it was found that the rock was only covered with 3 feet of water rather than 4 feet. Since this rock is in the path of many fishing boats, even though only about 175 meters off shore, it is of some importance and should be plotted using the symbol of a rock awash at extreme low tides and reported in "Notice to Mariners".

Chas. R. Bush, Jr.,
Jr. Cartographic Engr.

Pac

July 11, 1934

Division of Hydrography and Topography:

Division of Charts:

Tide Reducers are approved in
1 volume of sounding records for

HYDROGRAPHIC SHEET 4692 (Additional Work)

Locality Hogg Bay, Bainbridge Island, Prince William Sound, Alaska

Chief of Party: A. M. Sobieralski in 1934
Plane of reference is mean lower low water
2.6 ft. on tide staff at Seward
14.9 ft. below B. M. 1 a

Height of mean higher high water above plane of reference

is 10.6 ft.

Condition of records satisfactory except as noted below:

H A Marmer

Acting Chief, Division of Tides and Currents

Section of Field Records

REPORT ON ADDITIONAL WORK OF HYDROGRAPHIC SHEET NO. 4692(1934).

Hogg Bay and Prince William Sound, Alaska.

Chief of Party - A.M.Sobieralski.
Surveyed by - F.B.Quinn.
Plotted and Verified by - C.W.Bush.

The work comprises the examination for a reported rock in Hogg Bay. A least depth of 3 feet at M.L.L.W. was found and this has been plotted as a rock "awash at extreme low tides" in accordance with instructions for "Treatment of Rock Symbols on Hydrographic Surveys" as promulgated by the Section of Field Records.

The rock has been charted as a sunken rock prior to final verification from Chart Letter 420(1934) and published as such in Notice to Mariners 27 of 1934. This should be connected to conform to the symbol and notation shown on the sheet.

A.L. Shalowitz

Approved

E K Green
Chief, Section of Field Records.

L.O. Colbert
Chief, Division of Charts.

J S Borden
Chief, Section of Field Work.

G Rude
Chief, Division of H. & T.