

5454

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Form 504
Ed. June, 1928

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

State: S. W. Alaska

DESCRIPTIVE REPORT

~~Hydrographic~~ } Sheet No. ^S 8233
Hydrographic

LOCALITY 5454

S. W. ALASKA.

Gulf of Alaska

Southeast of Montague Island

19³³.

CHIEF OF PARTY

A. M. Sobieralski, H. & G. E.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

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REG. NO. 5454

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. S-8233

REGISTER NO. ~~#8233~~ 5454

State S.W. Alaska

General locality Gulf of Alaska

Locality Southeast of Montague Island

Scale 1 - 80,000 Date of survey May to October, 1933

Vessel U. S. C. & G. S. S. SURVEYOR

Chief of Party A. M. Sobieralski, H. & G. Engr.

Surveyed by _____

Protracted by H. G. Conerly

Soundings penciled by H. G. Conerly.

Soundings in fathoms ~~FSS~~

Plane of reference M L L W

Subdivision of wire dragged areas by _____

Inked by William R. Muller

Verified by William R. Muller

Instructions dated April 15, 1933.

Remarks: _____

U. S. GOVERNMENT PRINTING OFFICE: 1929
Applied to Chart 8515 - Nov. 1934 - J.F. Bumble
" " " 8557 Jan 1935 - J.F. Bumble
" " " 8502 " " J.F. Bumble

DESCRIPTIVE REPORT

to accompany

HYDROGRAPHIC SHEET NO. ~~W~~^S - 8233.

GULF OF ALASKA - MONTAGUE ISLAND

Scale 1 - 80,000

U. S. C. & G. S. S. SURVEYOR - A. M. Sobieralski, Chief of Party
Instructions dated April 15, 1933.

This sheet covers an area eastward of Montague Island extending roughly to a line between Middleton Island and Cape Hinchinbrooke. Most of the area had been previously surveyed on H 3024, scale 1 - 200,000, but the wide space between soundings on that sheet made it advisable to develop the area more thoroughly.

SURVEY METHODS - The ship was used exclusively on this survey. Soundings are all with the fathometer and a sufficient number of vertical casts were taken to compare with the fathometer. The agreement with soundings on H 3024 was an additional check. The fathometer soundings were reduced in accordance with the Hydrographic Manual, using a correction for temperature and salinity. A more detailed explanation of these corrections accompanies the season's report.

The work was started using positions of mountain peaks as shown on H 3024 which had been located by sextant cuts. They were later located by triangulation and no large discrepancies were noted. There are few well defined or characteristic peaks in this area and for this reason considerable difficulty was experienced in identifying the signals. Station MONT near the northeastern end of Montague Island and station TIP near the southern end were particularly difficult to identify. The many changes in names of signals in the record are due to this difficulty.

The boat sheet was prepared in the office and the compilation of soundings from previous surveys proved particularly useful in comparing soundings, etc.

In comparing the boat sheet with the smooth sheet a great many lines do not agree. This is due to the fact that signal TIPTO (near the south end of Montague Island) was confused with signal TIP, and the boat sheet was not corrected.

Bottom specimens were obtained when underway in depths up to sixty fathoms, by letting out the lead, and when stopped for vertical cast soundings. It is suggested that additional bottom characteristics could be added to the sheet from H 3024, or else the bottom characteristics now charted should be retained on the chart, supplementing them where necessary from this sheet.

*see revised
plan 6.10*

SPACING OF LINES - As stated before, much of this area had been surveyed on H 3024. As excellent agreement was found, the lines inside of the fifty fathom curve in the eastern part of the sheet were spaced one mile apart instead of a half mile. It is considered that this spacing, supplementing the work on H 3024, gives sufficient development.

It is suggested that the logical way to compile the work from this sheet would be to retain the soundings now charted, and supplement them with selections from this sheet.

DANGERS - No dangers were found in the area covered by this sheet. In fact, the area which has already been charted from H 3024 could remain as it stands.

COMPARISON WITH PREVIOUS SURVEYS - On account of the unusually careful manner in which the boat sheet was prepared, a very good comparison with other surveys was practicable. The agreement with H 3024 was excellent. With H 4730 to the westward, the agreement with the vertical casts indicated on the sheet was very good, but the fathometer soundings on that sheet are generally two or three fathoms deeper than the vertical casts in depths between sixty and seventy fathoms, indicating, possibly, some trouble with the reduction of the fathometer soundings. As the difference in this depth is of little consequence, no extended investigation of the matter is justifiable. The junction with H 2612 on the northward is also good.

Respectfully submitted,



A. M. Sobieralski, H. & G. Engr.
Commanding Str. SURVEYOR.

STATISTICS

Sheet H - 8233

DATE	DAY	VOL.	MILES	POSITIONS	SOUNDINGS
5 - 23 - 33	A	1	24	21	62
27	B	1	12.5	15	50
6 - 6 - 33	C	1	103	95	363
7	D	1	112	105	314
8	E	1	115.3	110	478
9	F	2	69	75	237
13	G	2	46	44	239
14	H	2	48	68	205
23	J	2	137	179	721
24	K	3	77	106	369
7 - 6 - 33	L	3	31.5	41	95
29	M	3	34	32	144
8 - 1 - 33	N	3	67.5	78	655
2	P	3&4	73.9	71	261
9 - 10 - 33	Q	4	87.5	106	513
11	R	4	91.4	124	760
12	S	4&5	57	77	414
13	T	5	64	78	407
28	U	5	75	117	596
29	V	5	19.5	28	138
10 - 2 - 33	W	5	31.4	29	220
Totals			1376.5	1599	7241

fac

August 6, 1934

Division of Hydrography and Topography:

✓ Division of Charts:

Tide Reducers are approved in
5 volumes of sounding records for

HYDROGRAPHIC SHEET 5454

Locality Southeast of Montague Island, Gulf of Alaska

Chief of Party: A. M. Sobieralski in 1933
Plane of reference is mean lower low water reading
3.9 ft. on tide staff at Latouche
13.4 ft. below B. M. 2

Height of mean higher high water above plane of reference
is 11.5 feet

Condition of records satisfactory except as noted below:

Chief, Division of Tides and Currents

Field Records Section (Charts)

HYDROGRAPHIC SHEET No. 5454.

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

Number of positions on sheet	1599.
Number of positions checked	14...
Number of positions revised	None..
Number of soundings recorded	7241..
Number of soundings revised	17....
Number of signals erroneously plotted or transferred	None..

Date:.....September 4, 1934.....

Cartographer:.....*W. R. Mullen*.....

Verification of protracting

Verification & inking of rocks and shoals

see 1st par. of verifier's report, 83.
~~No verification of protracting.~~

Time:

Verification of inking by

W. R. Mullen

Time: 83 1/2 h.

Review by

John G. Ladd

Time: 22 h.

September 5, 1934.

Verification Report H-5454 (1933)

~~Section of Field Records.
Report on Hydrographic Sheet No. 5454.
Southeast of Montague Island.
Gulf of Alaska.
S. W. Alaska.~~

Surveyed May to October, 1933.
Instructions dated April 14, 1932.
Chief of Party- A. M. Sobieralski.
Surveyed by A. M. Sobieralski.
Protracted by H. G. Conerly.
Soundings penciled by H. G. Conerly.
Verified and inked by W. L. Mullen.

There was no verification of this sheet as far as protracting was concerned before its receipt for inking by the writer. Captain Ellis after a consultation with Captain Adams decided that no verification of positions was necessary unless some condition arose that would obviously require investigation. This condition arose in a few instances but in every case the plotting was found to be correct. ✓

The penciling of the sheet was found to be well done, as a whole, seventeen soundings having to be revised on the entire sheet. ✓

The depth curves can be completely drawn.

Except as noted below the crossings on the sheet are excellent. ✓

1.- Positions 45 to 46 D. A 64 fathom sounding occurring inside of a 55 fathom sounding has been rejected as too deep.

2.- Positions 97 to 98 D. The writer has replotted the soundings between these positions with more careful regard to the time interval than was used in the field. This plotting seems to show better agreement, or at any rate plausible cause for rejecting the 108 fathom sounding which occurs between positions 34 and 35 P. ✓

* 3.- Positions 69 to 71 Q. The soundings between these positions have not been inked. The crossing is bad and in view of the fact that two soundings between positions 71 and 72 Q have been rejected in the records, apparently on account of excessive depth. It would seem that the fathometer was not functioning properly at this time, although nothing in the records is shown to indicate that this is the case. This condition may also be due to the fact that the fathometer reader was reading the initial flash instead of the depth as occurred at Positions 69 to 72 D. (See note by A. M. S. in Volume I at Page 27.) It should be noted however that the 112 fathom sounding falls directly above a 113 fathom sounding on Chart 8551. ✓

** Sounding between Pos 69+70 Q.
inked and accepted W.L.M.*

The soundings for L day have not been inked. (See note at start of this days records.) This days work appears on Hydrographic Sheet No. 5447 and after photostatic enlargements are made, these soundings will be transferred to H-5454 as overlap. The plotting of positions on H-5447 is probably stronger than on H-5454. ✓

H-5454.

When this sheet was received from the vault there was a long smear of tobacco juice almost entirely across the north end. The writer has spent considerable time in trying to remove this, but with only partial success. No more erasing should be attempted on this sheet. To do so will result in wearing the paper through to the fabric on which it is mounted. The sheet was also received in a somewhat dirty condition from the vault. ✓

Respectfully submitted,

W. L. Muller

Section of Field Records

HYDROGRAPHIC SURVEY NO. 5454 (1933).

Gulf of Alaska-----Southeast of Montague Island
Instructions dated April 15, 1933 (SURVEYOR)

Fathometer Soundings----- Three Point Fixes on Shore Signals.

Chief of Party- A. M. Sobieralski
Surveyed by- A. M. Sobieralski
Protracted by- H. G. Conerly
Soundings penciled by- H. G. Conerly
Verified and inked by- W. Mullen

1. Condition of Records.

The records conform to the requirements of the Hydrographic Manual with the following exceptions:

(a) Although the descriptive report states that a sufficient number of vertical casts were taken as comparisons with the fathometer, only 3 comparative vertical casts and fathometer soundings are recorded in the sounding record.

(b) In depths greater than 60 fathoms few bottom characteristics were obtained. These are supplemented by the bottom characteristics on H3024 in accordance with the recommendation of the Chief of Party.

2. Compliance with Instructions for the Project.

The survey satisfies the instructions for the Project.

3. Sounding Line Crossings.

Altho no cross lines were called for in the instructions there are a few on this survey. The crossings are satisfactory with the following exceptions; at lat. 50°46.0' long. 147°12.2' the soundings between pos. 69 and 71 Q make a poor crossing with "D" and "M" days indicating about 12 fath. greater depths in approximate 100 fathoms. The discrepancy however is insufficient to warrant a rejection of the soundings.

4. Depth Curves.

The usual depth curves could be satisfactorily drawn.

5. Junctions with Surveys.

Satisfactory junctions with the new survey are made by the following surveys, H 2612 (1902) on the north, H 5461 (1933) on the northwest and H 4730 (1927-28) on the southwest.

5. The junctions with H 5460 (1933) on the west and with H 5447 (1933) on the south will be considered in the review of those surveys. There are no contemporary surveys to the eastward of H 5454 (1933). However this area is covered by H 3024 (1909) which makes an excellent agreement with the new work. (See par. 6 A)

6. Comparison with Prior Surveys.

(a) H3024 (1909)

This survey covers the major portion of the area of the present survey and is in satisfactory agreement with it. In view of this and the lack of bottom characteristics on the new survey, numerous bottom characteristics from H 3024 (1909) have been transferred to the new survey. These are shown in red.

7. Comparison with Chart 8551.

Within the area of the present survey the chart is based on surveys considered in the foregoing paragraphs and contains no additional information that needs consideration in this review.

8. Field Plotting

The field plotting is satisfactory.

9. Additional Field Work Recommended.

No additional field work is recommended.

10. Note to Compiler.

Because of the excellent agreement with the present survey H 3024(1909) can be used to supplement the new survey whenever necessary for charting purposes.

11. Superseding old Surveys.

There are no surveys to be superseded by the new work, H5454 (1933)

12. Reviewed by-John G. Ladd. September 1934

Inspected by- A.L.Shalowitz

K.T. Adams
K. T. Adams
Chief, Section of Field Records.
J. Borden
Chief, Section of Field Work.

Examined and approved:

L. O. Pollock
Chief, Division of Charts.
G. H. Hude
Chief, Division of H. & T.

25 Jan 23, 1936
Laf