

5460  
5461

U. S. COAST & GEODETIC SURVEY  
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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

} Sheet No.	Topographic	M-2533	546
	Hydrographic	M-2633	546

LOCALITY

Gulf of Alaska

OUTSIDE COAST MONTAGUE ISLAND

North, Central

193 3

CHIEF OF PARTY

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

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

REG. NO. 5460

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. M-2633

REGISTER NO. <sup>5460</sup> 5460

State S. W. Alaska

General locality Gulf of Alaska *small*

Locality Outside Coast Montague Island *large*  
~~Coast~~

*Approved*  
*H. J.*  
*200*

Scale 1:20,000 Date of survey June - September, 1933

Vessel Str. Surveyor - Launch #4

Chief of Party A. M. Sobieralski

Surveyed by A. M. Sobieralski, Roger C. Rowse & V. M. Gibbens

Protracted by V. M. Gibbens & R. A. Marshall

Soundings penciled by R. A. Marshall

Soundings in fathoms ~~XXXX~~

Plane of reference M.L.L.W.

Subdivision of wire dragged areas by

Inked by

*C. S. Lighter*

R.B. Krum

Verified by

*[Signature]*

R.B. Krum

Instructions dated April 15, 1933

Remarks: Contains reconnaissance topography

*Applied to OH 8515 - Dec. 1934 by J.S. Danks*  
*" " " 8551 " June 1935 " "*  
*" " " 8502 " " " "*

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

REG. NO. 5461

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. M-2533

REGISTER NO. <sup>5116</sup> 5461

State S. W. Alaska

General locality Gulf of Alaska *Marshall*

Locality Outside Coast Montague Island *Large*

Scale 1:20,000 Date of survey June - September, 19 33

Vessel Str. SURVEYOR - Launch #4

Chief of Party A. M. Sobieralski

Surveyed by A. M. Sobieralski, Roger C. Rowse & V. M. Gibbens.

Protracted by V. M. Gibbens & R. A. Marshall

Soundings penciled by R. A. Marshall

Soundings in fathoms ~~feet~~

Plane of reference M. L. L. W.

Subdivision of wire dragged areas by \_\_\_\_\_

Inked by C. S. Lightbrown

Verified by " " " "

Instructions dated April 15, 19 33

Remarks: Contains reconnaissance topography.

*Approval*  
*RLS*  
*L.S.P.*

*Applied to COM 8515 - Nov 1934 - J. A. ...*

DESCRIPTIVE REPORT

to accompany

HYDROGRAPHIC SHEETS M-2533 and M-2633

EAST COAST MONTAGUE ISLAND

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

A. M. SOBIERALSKI, COMMANDING.

SEASON - 1933

Instructions: April 15, ~~1934~~ 1933

Limits: These sheets show the inshore hydrography along the outside (east) coast of Montague Island, Prince William Sound, Alaska, from Box Point (name applied by field party) northeastward to a junction with H-2612 at a point about 6 miles south of Zaikof Point. A few lines into Patton Bay and south and east of the Wooded Islands make a junction with H-4730, but the inshore hydrography around the Wooded Islands and in Patton Bay remains unfinished.

As the shore line of Patton Bay has not been surveyed, it was sketched in from numerous directions taken at triangulation stations. See lists of directions for stations Box, Isle, Cape Cleare, Squeeze, Smelt and Wooded. In addition a sketch from station Cape Cleare was used. The sketch however is deceptive for hills obscured any view of the south shore of Patton Bay.

Attention is directed to the elevation of the outermost of the Wooded Islands, which is charted as 20 feet. This elevation was obtained from H-4730, but is the elevation of the small rock to the southward of the island. The island is higher than Tanker Island and visible at a greater distance. It is shaped very much like the weights used in holding a spline - higher at the western end with a slight rise at the eastern end where  $\Delta$  Isle is located. The western part of the island is wooded.

survey methods: The work was done partly by the ship and partly by ship's launch. The launch used a power sounding machine and hand lead while the ship used the Fathometer. Corrections for salinity and temperature were applied to fathometer soundings in accordance with the Hydrographic Manual. More detailed description of method of applying these corrections is given in Season's Report.

A few fathometer soundings of less than 15 fathoms were taken eastward of the Wooded Islands. The fathometer on this vessel usually

reads low in these depths, but as such an error would be on the side of safety, these soundings should be retained until the area has been surveyed in more detail.

Dangers: The area eastward and northward (true) from the outermost island of the Wooded Islands has not been surveyed. Soundings indicate irregular bottom and vessels should keep two miles away. H 5460

Off Box Point, rocks and islets extend more than 1/2 mile eastward from the point and irregular bottom extends almost two miles off the point. Vessels should keep two miles away. H 5460

In latitude 59-58.6 longitude 147-16.65 a rocky shoal of small extent with 11 fathoms least water was found. A hand lead sounding was obtained. The ship and launch spent considerable time developing in this area and it is believed that the least water was obtained. H 5460

About 2 miles northward of Box Point, a rock and gravel ledge terminating in a group of rocks covered at high water, makes out 1/2 mile to the eastward. H 5460

The shore to the northward is fringed by boulders, making landings very difficult, but generally there is deep water from 200 to 300 yards from shore.

Comparison with previous surveys:

There are a few soundings on H-3024 which fall within the area surveyed, and agree with this work. Otherwise there are no other surveys. The junction with H-4730 on the south and with H-2612 at the northern end of the work is good.

junction of bay  
by 2 minutes of long  
15.1  
✓

Anchorage: The prevailing storms in this area come from eastward and northward. There are no anchorages in this area giving shelter from these directions. It is possible that some shelter may be obtained in the northern part of Patton Bay, but this area has not been surveyed.

Northward of Box Point good anchoring bottom may be found in 50 to 20 fathoms sand bottom, but sheltered only from the south and west.

Patton Bay generally does not furnish any better shelter than the anchorage northward of Box Point, although the northern part of the bay may be better.

The Nellie Martin River (name furnished by field party) entering the southern part of Patton Bay, has about 1 foot at M. L. L. W.

on the bar at the entrance with deeper water inside. Small launches entering at high water can find good shelter. To supply a house and landing some distance up the river a canvas barge was used with which it was possible to enter at any stage of the tide, except extreme low water.

The river about two miles northward of Box Point is shoal and cannot be entered with a boat.

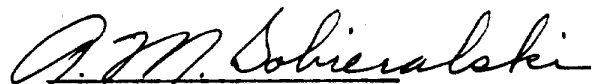
New Place Names: In addition to the names shown on topographic sheet of this area, the following new names are suggested:

Patton Bay: The bay indenting the east coast of Montague Island between the Wooded Islands and Box Point is an important feature large enough to justify a name on even small scale charts. The name should therefore be selected with care, and I recommend the name Patton Bay, in honor of Captain Raymond S. Patton, Director of the Coast and Geodetic Survey, who has done so much to make the prosecution of these surveys in Alaska possible, and who issued the orders for this survey. The name is particularly appropriate because Captain Patton was engaged on surveys in Prince William Sound when engaged on field work, before going to the Washington Office.

Cunningham Island: On the largest of the Wooded Islands group there is a house and outbuildings for a fox ranch formerly maintained by Mr. Frank Cunningham. He also maintained the house and plant up the Nellie Martin River. I received almost a death-bed request from Mr. Cunningham to apply his name to some feature in this vicinity. He died at Cordova in the summer of 1933. Several prominent persons have spoken well of Mr. Cunningham. As it must have taken considerable courage to explore and undertake to live in so inaccessible a section, he must have been a real pioneer, and the name Cunningham Island is recommended for the largest of the Wooded Islands. The name has some usage already.

Nellie Martin River: The river entering the southern part of Patton Bay is quite generally known by the above name. I have not been able to determine the origin. *Hold till survey of bay is made,*

Respectfully submitted,

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

STATISTICS

SHEET NO. M-2633

<u>Vol.</u>	<u>Day</u>	<u>Date</u>	<u>Positions</u>	<u>Soundings</u>	<u>Statute Miles</u>
3	a	6-19-33	83	234	14.1
3	b	6-20	151	518	28.4
3	c	7-11	72	387	16.1
4	c	7-11	86	361	19.4
4	d	7-13	118	438	27.0
1	A	7-13	80	405	32.0
1	B	7-14	24	123	11.8
1	C	7-28	67	279	29.0
4	e	7-14	9	23	1.0
4	f	7-28	77	223	14.5
2	D	9-11	36	195	20.5
2	E	9-12	60	327	26.0
5	g	9-12	154	500	39.5
2	F	9-13	46	241	20.5
5	h	9-13	116	340	24.8
2	G	9-29	<u>126</u>	<u>482</u>	<u>44.5</u>
		Total:	1,305	5,076	369.1

STATISTICS

SHEET NO. M-2533

<u>Vol.</u>	<u>Day</u>	<u>Date</u>	<u>Positions</u>	<u>Soundings</u>	<u>Statute Miles</u>
1	A	6-22-33	59	173	30.1
1	B	7-11	123	474	63.5
1	C	7-13	47	177	21.0
2	a	8-1	119	306	29.9
2	b	8-2	95	315	25.2
1	D	9-29	<u>18</u>	<u>63</u>	<u>9.0</u>
	Total:		461	1,508	178.7



Lac

August 6, 1934

Division of Hydrography and Topography:

✓ Division of Charts:

Tide Reducers are approved in  
5 volumes of sounding records for

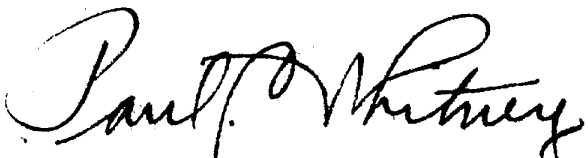
HYDROGRAPHIC SHEET 5460

Locality Outside Coast 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

RAC

August 6, 1934

Division of Hydrography and Topography:

✓ Division of Charts:

Tide Reducers are approved in  
2 volumes of sounding records for


HYDROGRAPHIC SHEET 5461

Locality Outside Coast of Montague Island, Gulf of Alaska

Chief of Party: A. M. Sobieralski  
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. H-5460

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

Number of positions on sheet	.1305.
Number of positions checked	.51...
Number of positions revised	.170...
Number of soundings recorded	5076.....
Number of soundings revised	.685.....
Number of signals erroneously plotted or transferred	.....3

Date:..... Oct. 3, 1934.....

Cartographer:..... R. B. Krum.....

Verification of plotting  
Verification & inking of rocks and shoals) by R. B. Krum

Time: 29½ hrs.

Verification of inking by R. B. Krum

Time: 36½ hrs

Review by

*John G. Reed*

Time: 4½ hrs.

Field Records Section (Charts)

HYDROGRAPHIC SHEET No. <sup>H</sup>5461..

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

Number of positions on sheet	461...
Number of positions checked	.54...
Number of positions revised	.1....
Number of soundings recorded	1508.
Number of soundings revised	.19...
Number of signals erroneously plotted or transferred	.0....

Date: *September 4st. - 1934* .....

Cartographer: *C. Stanley Lightbown* .....

**Verification of pretrawling**

**Verification & taking of rocks and shoals**

C. S. LIGHTBOWN

C. S. LIGHTBOWN

Time: 20 hrs

**Verification of taking by** C. S. LIGHTBOWN

Time: 17 "

**Review by**

*John G. Reddy*

Time: 15 hrs

Verification Report H. 5460.

Records. The records are neat and legible. They conform to the requirements of the Hydrographic Manual.

Protracting. 165 positions were reprotracted because they depended upon signal CONE which was found to be 75m in error. Aside from that, the protracting was satisfactory. The reprotracting was done in the office by A. H. Yeomans.

Drafting. The field drafting was well done except that:-

1. Day numbers and letters entered in the records in blue are inked on the sheet in red.
2. No reference station was given by the field party.

Crossings. The few crossings on the sheet are in good agreement.

Curves. The usual depth curves can be drawn.

Comparison with Other Data. The boat sheet did not completely cover the hydrography shown on the smooth sheet.

The hydrographic sheet checked well with the boat sheet except for those aforementioned positions which depended upon station CONE.

The topographic stations were not verified by the field party. When they were checked by the verifier, stations REX and RAN were each changed about 10 m while station CONE was changed 75 m. The change in stations REX and RAN was so slight that it did not effect the protracting sufficiently to necessitate any change. However all positions depending on CONE were reprotracted.

Practically all of the topography outside the high water line was transferred from T. 4835 by the verifier.

Junctions. This sheet joins H. 5461 on the northeast and H. 5454 on the east and south. The overlap is in good agreement.

Remarks. The names PATTON BAY and CUNNINGHAM ISLAND have been left in pencil pending a decision by the Bureau of Geographic Names.

Submitted by - R. B. Krum.  
Oct. 3, 1934.

Report on Sheet No. H. 5461

Chief of party - A. M. Sobieralski.  
Protracted by - V. M. Gibbens & R. A. Marshall.  
Surveyed by - A. M. Sobieralski, Roger C. Rowse, V. M. Gibbens.  
Surveyed - June - Sept. 1933.  
Soundings plotted by - R. A. Marshall.  
Verified and inked by - C. Stanley Lightbown.

1. The records conform to the requirements of the General Instructions, ~~except in the recording of Depths from (in quarters) 10 to 10 $\frac{1}{2}$  fathoms (these were entered as in Manual)~~ were added by the verifiers. ✓
2. The depth curves can be completely drawn. *except under 10 fathoms.* ✓
3. The field plotting was as prescribed in the General Instructions. ✓
4. Office draftsman did not do over any of the field draftsmans work. ✓
5. Junctions with adjacent sheets could not be made due to fact that these sheets were not complete. ✓
6. "Rocks awash" were not drawn in large enough symbols and were not as clear as they might have been. ✓
7. Field drafting - good. ✓

Submitted by C. Stanley Lightbown,  
Sept. 4, 1934.

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 5460 (1933) - FIELD NO. M-2633

Outside Coast Montague Island, Gulf of Alaska, S. W. Alaska  
Surveyed in June - September, 1933  
Instructions dated April 15, 1933 (SURVEYOR)

Fathometer, Machine and Hand Lead  
Soundings.

3 Point Fixes on Shore Signals.

Chief of Party - A. M. Sobieralski.  
Surveyed by - A. M. Sobieralski, Roger C. Rowse, and V. M. Gibbens.  
Protracted by - V. M. Gibbens and R. A. Marshall.  
Soundings penciled by - R. A. Marshall.  
Verified and inked by - R. B. Krum.

1. Condition of Records.

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

- a. A triangulation reference station was not given on the smooth sheet. This was added in the office.
- b. Evidence that the plotting of the topographic signals had been checked was lacking, since the initials of the checker were omitted. In accomplishing this necessary check in the office, 3 signals were found to be in error. The worst of these was signal "Cone" which was 75 meters in error and as a result of its correction, 165 positions had to be re-plotted.
- c. The field party did not transfer all the topography outside the high water line from the contemporary topographic survey to the smooth sheet. This has been accomplished in the office.
- d. The boat sheet does not include the hydrography south of lat.  $60^{\circ}56'$  and east of long.  $147^{\circ}16'$ .
- e. No lead line comparisons are noted in the records.

2. Compliance with Instructions for the Project.

Insofar as the survey extends it generally satisfies the instructions for the project with the exception that to the eastward of Box Point the spacing of the lines should have been reduced to conform to par. 17 of the instructions, which calls for lines 50 to 100 meters off rocky points.

Palton Bay and the area southward to a junction with H-4730 (1927) still remains unsurveyed.



3. Sounding Line Crossings.

No regular system of cross lines was run. Those that were run, as well as a comparison of adjacent lines, show good agreement.

4. Depth Curves.

Within the limits of the survey the usual depth curves may be satisfactorily drawn, including portions of the 1 and most of the 2 and 3 fathom curves.

5. Junctions with Contemporary Surveys.

Satisfactory junctions are made with H-5461 (1933) on the north, H-5454 (1933) on the east and south.

6. Comparison with Prior Surveys.

a. H-3024 (1909).

This survey slightly overlaps the new work on the east and the soundings are in good agreement. H-3024 (1909) may be used to supplement the new work for charting purposes wherever necessary.

7. Comparison with Chart No. 8515.

The new survey shows an elevation of 90 feet on the outermost island of the wooded island group and 20 ft. elevation on the next one, whereas the chart shows 20 ft. elevation and no elevation, respectively. (See D. R., page 1, 3rd par.). Except for the above, the chart, within the limits of the new survey, contains no information that needs consideration in this review.

8. Field Plotting.

The field plotting was satisfactory with the following exception:

- a. The day letters for the hydrography done by the launch are shown in the sounding volumes in blue but are inked on the smooth sheet in red.

9. Additional Field Work Recommended.

a. For future consideration.

When work is resumed in this locality, split lines should be run on the area eastward of Bex Point between the 5 and 10 fm. curves with a special examination of the  $5\frac{1}{2}$  fm. spot in lat.  $59^{\circ}57.5'$ , long.  $147^{\circ}19.2'$  and the 8 fm. spot in lat.  $59^{\circ}57.1'$ , long.  $147^{\circ}18.3'$ .

6  $\bar{z}$  - H-8312(1956)

34 H-8312  
(1456)

10. Note to Compiler.

The topographic details south of @ "Poe" (lat. 59°57.6') were sketched from directions taken at various triangulation stations. They may be used for charting purposes if necessary pending a survey of the area. Attention is also called to the elevations of the two outermost islands south of Patton Bay which differs from the charted elevations. (See D. R. H-5460, page 1).

11. Superseding Old Surveys.

There are no surveys to be superseded by the new survey.

12. Reviewed by - John G. Ladd, October, 1934.

Inspected by - A. L. Shalowitz.

Examined and approved:

*K. T. Adams*

K. T. Adams,  
Asst. Chief, Division of Charts.

*L. O. Pollock*  
Chief, Division of Charts.

*F. S. Borden*  
Chief, Section of Field Work.

*G. W. ...*  
Chief, Division of H. & T.

Section of Field Records.

REVIEW OF HYDROGRAPHIC SURVEY NO. 5461 (1933)

Outside Coast Montague Island, Gulf of Alaska, S. W. Alaska.  
Instructions dated April 15, 1933 (SURVEYOR)  
Surveyed June - September 1933.

Fathometer, Machine and Hand Lead Soundings - 3-Point Fixes on Shore Signals.

Chief of Party - A. M. Sobieralski.  
Surveyed by - A. M. Sobieralski; R. C. Rowse; V. M. Gibbens.  
Protracted by - V. M. Gibbens; R. A. Marshall.  
Soundings penciled by - R. A. Marshall.  
Verified and inked by - C. S. Lightbown.

1. Condition of Records.

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

- a. The note on the smooth sheet pertaining to the plotting and checking of the projection and control points failed to show who plotted and checked the topographic signals and this fact makes it doubtful whether the plotting was checked. The office draftsman has consequently checked the topographic signals.
- b. A reference  $\Delta$  Station had not been indicated on the smooth sheet. This has been added in the office, as well as the Geographic Datum.
- c. No lead line comparisons were shown in the records.
- d. All of the topographic features outside the highwater line had not been transferred from the contemporary topographic sheet to the smooth sheet.

2. Compliance with Instructions for the Project.

The survey satisfies the instructions for the project.

3. Sounding Line Crossings.

There are no sounding line crossings and none were called for in the instructions.

4. Depth Curves.

Within the limits of the survey the usual depth curves may be satisfactorily drawn, including portions of the 2, 3 and 5 fathom curves.

5. Junctions with Contemporary Surveys.

Junctions have been effected with H. 5454 (1933) on the offshore side

and with H. 5460 (1933) on the southwest, which will be considered with the review of those respective sheets. A satisfactory junction is made with H. 2612 (1902) on the northeast, although it does not have any inshore development.

6. Comparison with Prior Surveys.

a. H. 3024 (1909).

This is the only prior survey within the limits of the new survey. Only a few soundings overlap H. 5461 (1933) and they are in good agreement.

b. T. 2611 (1902).

Several rocks awash and a reef on this survey in approximate lat.  $60^{\circ}13'.5$ , long.  $147^{\circ}01'.5$  were not located on the new topographic nor hydrographic surveys. These have been carried forward to the new hydrographic sheet in red.

7. Comparison with Charts Nos. 8515 and 8551.

Except for matters discussed above there are no other rocks, shoals or matters of importance that need consideration in this review.

8. Field Plotting.

The field plotting is satisfactory.

9. Additional Field Work Recommended.

No additional field work is recommended.

10. Superseding Old Surveys.

Within the area covered, the present survey, with the indicated additions from previous surveys, supersedes the following surveys for charting purposes:

H. 2612 (1902) in part.  
H. 3024 (1909) " "

11. Reviewed by - John G. Ladd - Sept. 1934.

Inspected by - A. L. Shalowitz.

*K. T. Adams*  
K. T. Adams,  
Chief, Section of Field Records.

Examined and approved:  
*L. O. Rollins*  
Chief, Division of Charts.

*Frank Borden*  
Chief, Section of Field Work.

*G. R. Ladd*  
Chief, Division of H. & T.

Box 17.

MOUNTAINS

PATTON BAY

HILL

NELLIE  
MARTIN.

Hill

LAKE

Hill

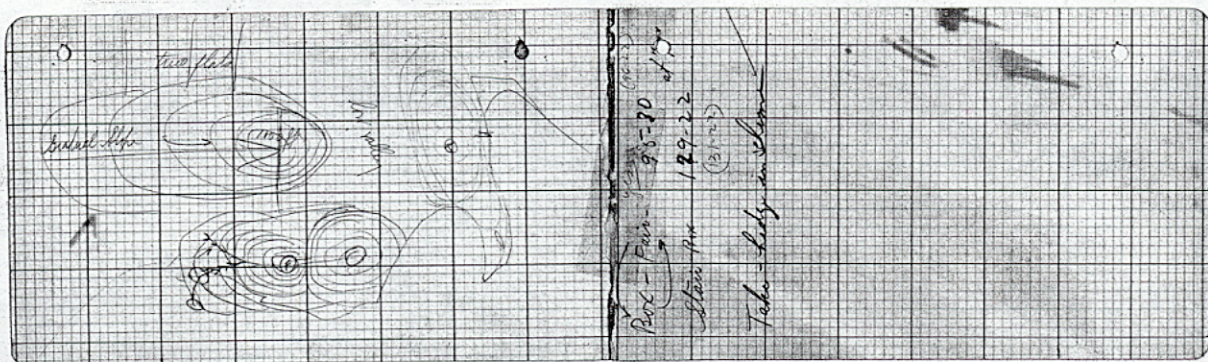
SMALL HILLS

Soft not visible

A

JEANIE  
COVE

Sketch by Lt. Marshall  
from A station Cape Clear  
Montague Island - Looking NE



Box - ~~198-80~~ 199-22  
198-80 of 199  
199-22 (198-80)

Take - Study in science

25 Jan 23, 1936  
EAP