

7923

Diag Cht No 8859

CS-344

Form 504

U. S. COAST AND GEODETIC SURVEY  
DEPARTMENT OF COMMERCE  
SUPPLEMENTAL  
DESCRIPTIVE REPORT

Type of Survey ..... Hydrographic .....  
Field No. .... SU-2151 ..... Office No. .... H-7923 .....

LOCALITY

State ..... Alaska .....  
General locality Alaska Peninsula-South Side .....  
Locality ..... Ivanof and Humpback Bays .....

19451-53

CHIEF OF PARTY

J. C. Bose

LIBRARY & ARCHIVES

DATE ..... February 2, 1954 .....

7923

FEB 2 1954

Form 537  
(Ed. June 1946)

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

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. **H-7923**

Field No. **SU-2151**

State **Alaska**

General locality **Alaska Peninsula - South Side**

Locality **Ivanof and Humpback Bays**

Scale **1:20,000** Date of survey **May - 1951 - 3 September 1953**

Instructions dated **8 Mar. 1951, Supp. Instructions dated 17 Mar. 1952 and 8 Apr. 1953**

Vessel **SURVEYOR (Launches No. 3 and No. 4)**

Chief of party **G. E. Boothe, J. C. Bose**

Surveyed by **F. I. Popper and J. C. Bull**

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

Fathograms scaled by **F. I. Popper**

Fathograms checked by **J. D. Hodges**

Protracted by **Gordon J. Thompson**

Soundings penciled by **Gordon J. Thompson**

Soundings in fathoms ~~MLLW~~ at ~~MLLW~~ MLLW

REMARKS: **Additional work done in 1953 to be protracted by the Washington Office.**

*Plotted during verification*

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

REG. NO. H-7923

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. H-7923

Field No. SU-2151

State ALASKA

General locality SOUTHWEST ALASKA

Locality ALASKA PENINSULA, SOUTH SIDE

Scale 1: 20 000 Date of survey May - Sept. 1951

Instructions dated 8 March 1951

Vessel Ship SURVEYOR

Chief of party Glendon E. Boothe

Surveyed by E. F. Hicks, R. H. Tryon, R. F. Lanier, W. R. Kachel, C. W. Mooney.

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

Protracted by R. F. Lanier

Soundings penciled by W. R. Kachel

Soundings in XXX fathoms feet at XXX MLW MLLW

REMARKS: Boat Sheet held aboard SURVEYOR for use during 1952 field season.

Photostat of boat sheet transmitted with smooth sheet.

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## DESCRIPTIVE REPORT

to accompany

SURVEY H-7923 - - (Field No. SU 2151)

### PROJECT

The survey was accomplished under project CS-344, using Original instructions to the Commanding Officer Ship SURVEYOR dated 8 March 1951.

### SURVEY LIMITS AND DATES

The survey covers this inside passage between Paul and Jacob Islands and the mainland from Coal Point to Alexander Point to Leader Island to latitude  $55^{\circ} 40'$ , longitude  $159^{\circ} 30'$ . Humpback Bay and Kupreanof Harbor as well as the outside coasts of Paul and Jacob Islands are included. Junction is made with contemporary surveys H-7927 (1951) and H-7924. (1951)

Portions of prior surveys H-7169, (1946) 1:80,000 and H-3796 (1914) 1:100,000 are included in the present survey.

Field work was begun on 20 May 1951 and ended on 24 September 1951

### VESSELS AND EQUIPMENT:

Lauches 2, 3, 4 from the SURVEYOR were used on the survey.

Launch 2 was equipped with Model 808 Depth Recorder No. S 110 and a shoran set for controlling position. The launch worked on the west side of Jacob Island from the entrance to Kupreanof Harbor southwesterly to a junction with the ship work; around the southeast sides of Jacob and Paul Islands and the east side of Paul Island to a junction with H-7924

Launch 3 was equipped with Model 808 depth recorder No. 137 S. It was used but three days in the area north of Egg Island.

Launch 4 was equipped with 808 Depth Recorder No. 47 S and was used in the area north of Paul Island, in Humpback Bay, and in Kupreanof Harbor.

Launch 2 and 3 worked from the ship during August. After the establishment of the shore camp on the north side of Jacob Island, launches 2 and 4 worked from the camp.

TIDE AND CURRENT STATIONS:

A portable tide gage was maintained at Kupreanof Harbor from 17 August to 24 September 1951. Reducers were entered without time or height corrections.

One current station was established by the Ship SURVEYOR in Kupreanof Harbor. A series of 25 hours of pole observations was obtained.

SMOOTH SHEET:

The smooth sheet projection was made by hand in the Seattle Processing Office. Shoreline and topographic details are from film positions T-8829, T-8830, T-8831, and T-8832. Verification of topographic details and shoreline has not been made.

(1941-44) (1941-45) (1941) (1941-42)

CONTROL STATIONS:

The adjusted triangulation is found in Folio V, pp 99-343. The topographic stations were pricked directly from the film positives except those from T-8830 which were plotted from DM's and DP's as scaled from the film positive. Hydrographic signals shown in blue were located from cuts taken by the hydrographic parties.

Shoran station EDGE, located at WEDGE, 1913 on Nagai Island, was used on the east and west sides of Jacob Island. Shoran station Gull was not used either because of the flat intersection formed with the Edge arcs or because it was masked by intervening topography. In the areas in which EDGE was received, positions were plotted using one arc crossed with a sextant angle on shore objects. In the remainder of the area, three point fixes on shore objects were used to control position.

The position of several of the topographic stations was changed on the boat sheet from the cuts taken in the field. The smooth plot of these cuts, however, verified the original positions so they were moved back to the original topographic locations. Considerable difficulty was experienced in the field in locating signal DAW on the south side of Kupreanof Harbor. This was due to an inability to get properly strong fixes in enough places to tie the location down. The smooth sheet location is the mean of all the sextant cuts.

SHORELINE AND TOPOGRAPHY:

The source of all shoreline and topographic details is topographic manuscripts nos. T-8829, T-8830, T-8831, and T-8832. Revisions by the hydrographers consist of some few relocations of photo-hydro stations and the following additional rocks awash which were noted during the course of hydrography:

\*1, below, is the same as a bare rock on T-8830 (1941-45)  
 \*7 and \*8, below, indicate the same rock, which is located by T-8829 (1941-45-46)

-3-

	Latitude North	Longitude West	Bare at MLLW	Pos No.
1.	55° 46'.56 ✓	159° 19'.46 ✓	4 ft. ✓	16 c
2.	55° 48'.78 ✓	159° 19'.90 ✓	4 ft. ✓	35 g
3.	55° 51'.71 ✓	159° 22'.92 ✓	<del>7 ft.</del> <sup>swash</sup> MHW	36 e
4.	55° 52'.02 ✓	159° 22'.57 ✓	<del>7 ft.</del> <sup>bare 1 ft</sup> MHW	80 e
5.	55° 51'.73 ✓	159° 19'.34 ✓	6 ft. ✓	47 e
6.	55° 50'.46 ✓	159° 21'.73 ✓	4 ft. ✓	24 a & 25 a
7.	55° 50'.39	159° 21'.66 59	6 ft. ✓	1 b } same *
8.	55° 50'.38	159° 21'.58 9	6 ft. ✓	84 h }
9.	55° 49'.83	159° 20'.93	<del>6 ft.</del> <sup>swash</sup> MHW	60 - 61 b

Item 8 above is probably the same rock as shown on T-8829 about 30 meters west of this position. The positions of all listed rocks were obtained from estimated distances from fixes taken during hydrography.

Along the outside coasts of Jacob and Paul Islands, it was not feasible to get close inshore. These coasts are precipitous, rocky, kelp fringed and generally foul so that hydrography could not be accomplished without jeopardizing life and property.

SOUNDINGS: ✓

Soundings were taken with 808 depth recorders with tachometer reeds calibrated for a velocity of 800 fathoms / second. No unusual corrections were applied to the soundings.

CONTROL OF HYDROGRAPHY: ✓

The hydrography accomplished by launches 3 and 4 was controlled by three-point fixes on shore objects. The areas accomplished by launch 2 from the west entrance to Kupreanof Harbor southwesterly along Jacob Island to a junction with the ship work and northeastward along the southeast coast of Jacob Island to the south end of Paul Island were controlled by one shoran arc from EDGE and a sextant angle on shore objects. The remainder of the area done by Launch 2 was controlled by three point fixes.

Along the southeast coast of Paul Island, it was not possible to land to establish a sufficient number of hydrographic signals. Several natural objects were cut in by the hydrographic party and used for control. These signals namely DUZ, <sup>UNA, LYN, WIT</sup> are not located as well as others on the sheet due to the paucity of available fixes for their location and the difficulty in following the selected point from place to place while they were being cut in.

ADEQUACY OF SURVEY

The survey is complete and adequate to supersede prior surveys for charting in the areas of completed hydrography. The hydrography of Ivanoff Bay and west of the line from Alexander Point through Leader Island to the vicinity of Fox Cape has not been done but will be accomplished during the next season's work.

The junctions with H-7924<sup>(1951)</sup> and H-7927<sup>(1951)</sup> are good and no holidays or excessive differences exist.

Depth curves can be adequately drawn at the junctions.

CROSSLINES:

About 8 percent of the lines run were crosslines.

The crossings were very good. The majority of the discrepancies were less than 3 percent of the depth.

The following was the only excessive crossing error noted by the smooth plotter. At latitude 55 46'.49 N and longitude 159 22'.20 W a shoal sounding of 3.1 fathoms was obtained on position No. 42 ell. A further development of the area was made using two different systems of lines but no further indication of this shoal was obtained. It is believed that position 42 ell is further inshore than indicated, probably due to a faulty fix. The following lines crossed on or near the 3.1 fathom sounding: 98 g - 99 g; 100 g - 101 g; 4 ell - 5 ell; 16 ell - 17 ell; and 18 ell - 19 ell. adjusted  
during  
ventilation

COMPARISON WITH PRIOR SURVEYS: (Reconnaissance)

No comparison made with H-3722 1914 scale 1:100,000

A comparison was made with survey No. H-7169, 1946, scale 1:80,000.

In general the surveys agree very well. The following discrepancies were noted:

Latitude 55° 41'.2 N, Longitude 159° 29'.3 W. Survey H-7169 (1946) shows a sounding of 44 fathoms in this area. The new survey shows 39<sup>36</sup> fathoms. The new survey was discontinued at this point and a continuation westward of the survey will probably resolve this discrepancy.

Latitude 55 43'.7 N, Longitude 159 26'.8 W. Survey H-7169 shows a 49 fathom sounding. The new survey shows 39<sup>33 and 40</sup> or 40 fathoms in this spot. Due to the difference of scale between the surveys and the more complete nature of the new survey it is recommended that the shoaler soundings be accepted.

Latitude  $55^{\circ} 44'.1$  N, Longitude  $159^{\circ} 27'.0$  W. Survey H-7169 (1946) shows 24 and 25 fathom soundings in this area. No indication of this shoal was found on the new survey where soundings of 48 and 49 fathoms are found. It is recommended that further development of the area be made when the survey is extended westward from this present limit. *Disproved by work of 1952 - 24 & 25 weak in position*

A comparison was made with survey H-3796, 1914, scale 1:100,000. Four soundings fall within the limits of H-7923 in the vicinity of Fox Cape. Discrepancies up to 10 o/o of the depth are noted. It is recommended that the old soundings be superseded by the new survey.

There are no known surveys by the U. S. Corp of Engineers in this area.

COMPARISON WITH CHART:

A comparison was made with USC&GS Chart No. 8859, scale 1:300,000, print date 27 August 1951 hand corrected to 17 March 1952. The chart and new survey agree as well as can be expected considering the difference in scale. The following excessive discrepancies were noted; positions are as scaled from the chart.

Latitude  $55^{\circ} 49'.1$  N, Longitude  $159^{\circ} 22'.5$  W. A charted sounding of 50 fathoms in area showing ~~21~~<sub>20</sub> fathoms on new survey.

Latitude  $55^{\circ} 44'.0$  N, Longitude  $159^{\circ} 21'.5$  W. Charted sounding of 33 fathoms. New survey shows ~~18~~<sub>16</sub> fathoms.

Latitude  $55^{\circ} 43'.3$  N, Longitude  $159^{\circ} 21'.1$  W. Charted sounding of 15 fathoms. New survey shows 30 fathoms.

Latitude  $55^{\circ} 42'.5$  N, Longitude  $159^{\circ} 22'.8$  W. Charted sounding of 7 fathoms. New survey shows ~~30~~<sub>32</sub> fathoms in this area.

Latitude  $55^{\circ} 42'.3$  N, Longitude  $159^{\circ} 24'.0$  W. Charted sounding of 7 fathoms. New survey shows ~~30~~<sub>31</sub> fathoms in this area.

It is recommended that these charted soundings be expunged from the chart

DANGERS AND SHOALS:

Following is a tabulation of newly found dangers and shoals.

Latitude  $55^{\circ} 45'.78$  N, Longitude  $159^{\circ} 16'.02$  W. Position No. 81 p plus 15 seconds. A shoal with least depth found of 14.5 fathoms.

Latitude  $55^{\circ} 43'.53$  N, Longitude  $159^{\circ} 25'.97$  W. Position No. 19 g plus 45 seconds. An extensive shoal area with a least depth found at this position of 31 fathoms.



Latitude 55° 46'.49 N, Longitude 159° 22'.20 W. Position No. 42 ell. A sounding of 3.1 fathoms was obtained but further development of the area failed to reveal additional evidence to verify this sounding at this position. See section K of this report.

Latitude 55° 47'.33 N, Longitude 159° 22'.19 W. Position Nos. 32 j. and 33 j. A pinnacle with a least depth of 3.4<sup>2</sup> fathoms was discovered at this location. The top of the pinnacle was clearly visible from the launch and a good location and depth was obtained.

Latitude 55° 51'.<sup>13</sup> N, Longitude 159° 20'.8 W. Position 104 h plus 1 minute and 45 seconds. A shoal with least depth found of ~~18~~<sup>12</sup> fathoms rising from surrounding depths of 20 fathoms and more.

All charted dangers, shoals, and bare rocks were found as charted or shoaler depths were found except for those previously listed.

COAST PILOT INFORMATION:

The information under this heading has been submitted on an area basis as a separate report.

AIDS TO NAVIGATION ✓

No fixed aids were located on this survey

Egg Island Reef Buoy 2, a red 2 - class nun was located at position 152 g, launch 4, in a depth of 36<sup>3</sup> feet, in latitude 55° 49'.03 longitude 159° 20'.98 on 18 September 1951.

LANDMARKS FOR CHARTS:

Form 567 was submitted on 28 March covering the following landmarks which fall within the limits of H-7923: -

- LEADER ISLAND
- PINNACLE
- ROCK
- PINNACLE

GEOGRAPHIC NAMES: *LSH* ✓

A geographic name report has not been submitted. The source for geographic names used is topographic manuscripts T 8829 and T 8830.

APPLICABLE DATA:

Fathometer Report  
Landmarks for Charts  
Coast Pilot Notes

submitted - *filed with H-7923*  
29 February 1952  
submitted - 24 March 1952  
not yet submitted

Respectfully submitted,

*Raymond H. Tryon Jr.*

Raymond H. Tryon Jr.  
Luit. Comdr. USC&GS

STATISTICS

For Hydrographic Survey - H-7923

Field No. SU-2151

USC&GSS SURVEYOR

CS - 344

Day Letter	Volume Number	Unit	Date	Number of Positions	Statute Miles Soundings
			1951		
a	1	Launch No. 2	17 Aug.	110 ✓	35.1 ✓
b	1 & 2	"	18 Aug.	144 ✓	42.1 ✓
c	2	"	19 Aug.	74 ✓	21.0 ✓
d	2 & 3	"	23 Aug.	139 ✓	42.3 ✓
e	3	"	29 Aug.	6 ✓	2.0 ✓
f	3	"	2 Sept.	71 ✓	21.7 ✓
g	3 & 4	"	3 Sept.	<del>146</del> 156	38.2 ✓
h	4	"	4 Sept.	66 ✓	9.4 ✓
j	4	"	6 Sept.	154 ✓	29.3 ✓
k <sup>k</sup>	5	"	7 Sept.	182 ✓	30.5 ✓
l	6	"	12 Sept.	132 ✓	29.0 ✓
m	6	"	13 Sept.	70 ✓	13.3 ✓
n	7	"	14 Sept.	144 ✓	26.9 ✓
p	7	"	15 Sept.	108 ✓	19.3 ✓
q	8	"	17 Sept.	125 ✓	12.2 ✓
r	8	"	18 Sept.	102 ✓	17.0 ✓
a	9	Launch No. 3	19 Aug.	156 ✓	38.0 ✓
b	9	"	23 Aug.	<del>39</del> 44	8.3 ✓
c	9	"	24 Aug.	12 ✓	3.3 ✓
a	10	Launch No. 4	29 Aug.	154 ✓	28.6 ✓
b	10	"	2 Sept.	103 ✓	19.9 ✓
c	11	"	5 Sept.	<del>68</del> 79	12.4 ✓
d	11	"	11 Sept.	69 ✓	10.8 ✓
e	11 & 12	"	13 Sept.	102 ✓	20.3 ✓
f	12	"	17 Sept.	141 ✓	27.1 ✓
g	12 & 13	"	18 Sept.	152 ✓	26.3 ✓
h	13	"	20 Sept.	140 ✓	23.5 ✓
j	13 & 14	"	22 Sept.	103 ✓	19.6 ✓
k	14	"	23 Sept.	45 ✓	7.7 ✓
l	14	"	24 Sept.	21 ✓	2.9 ✓
A	5	SURVEYOR	24 Sept.	14 ✓	0 ✓
B	5	"	25 Sept.	4 ✓	0 ✓
-	11	Launch No. 4	6 Sept.	1 ✓	-
			Total	3096	637.0
		H.L.		3120	
1952	totals	3		2933	547.7
1953	totals	3		86	10.4
Grand Totals		6		6139	558.1

TIDE NOTE

A portable tide gage was maintained during the entire period of field operations in Kupreanof Harbor in latitude  $55^{\circ} 47'.4$  longitude  $159^{\circ} 21'.0$ . MLLW on the staff is given as 2.5 feet

Reduction to soundings were made without correction for time or range.

APPROVAL SHEET

The field work on this Survey was conducted under the personal Supervision of Commander Glendon E. Boothe who has inspected the records and boat sheet.

The survey is believed complete and adequate for charting and complies with the instructions



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J. C. Bose

Comdr. USC&GS

Comdg. USC&GSS SURVEYOR

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

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. H 7923 (Additional work)

Field No. Su 2151

State Alaska

General locality Southwest Alaska, South Side Alaska Peninsula

Locality East side of Kupreanof Peninsula

Scale 1/ 20 000 Date of survey May - June 1952

Instructions dated 8 March 1951. Sup. 17 March 1952

Vessel SURVEYOR

Chief of party J.C. Bose

Surveyed by J.C. Bull and W.R. Kachel

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

Fathograms scaled by D.L. Wheeler and J.D. Hodges

Fathograms checked by D.L. Wheeler and J.D. Hodges

Protracted by J.D. Hodges

Soundings penciled by Clarence E. Pedersen

Soundings in fathoms ~~X feet~~ at ~~MLLW~~ MLLW

REMARKS:

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**SUPPLEMENTAL DESCRIPTIVE REPORT**

To  
**DESCRIPTIVE REPORT**  
To Accompany

**HYDROGRAPHIC SURVEY**  
No. H-7923 (Field No. SU-2151)  
1951 - 1952

Scale - 1:20,000

J. C. Bose, Chief of Party

**USCGC SURVEYOR**  
Launches No. 3 & 4  
John C. Bull & William R. Kachel - Hydrographers

**A. PROJECT:**

The original instructions for Project GS-344, dated 8 March 1951, and supplemental instructions dated 17 March 1952, to the Commanding Officer, Ship SURVEYOR, were followed.

**B. SURVEY LIMITS AND DATES:**

The survey covers Ivanof Bay and that portion of the inside passage that lies to the westward of Alexander Point, Leader Island and a point at latitude  $55^{\circ} 41'$  North, longitude  $159^{\circ} 29'$  West. A junction is made on the south with contemporary survey H-7996. Work was started on 24 May and was completed on 28 June 1952. (1952-53)

**C. VESSELS AND EQUIPMENT:**

No. 2,  
The SURVEYOR and motor launches No. 3, and 4 were used on this survey. The SURVEYOR, equipped with Model 808 Depth Recorder No. 128S, was used to run cross lines in that section of the inside passage between Jacob Island and Leader Island and to obtain bottom samples in depths over 20 fathoms. Motor launch No. 3, equipped with Model 808 Depth Recorder No. 56, was used for the survey of Ivanof Bay from Alexander Point north to the southern tip of ~~John~~ (Road) Island, the channel to the west of ~~John~~ (Road) Island, and the northern portion of Ivanof Bay that lies to the westward of a north-south line from the northern tip of ~~John~~ (Road) Island. Motor launch No. 4, equipped with Model 808 Depth Recorder No. S-110, was used for the inside passage that lies to the south of Alexander Point and west of a line through Alexander Point, Leader Island, and a point at latitude  $55^{\circ} 41'$  North, longitude  $159^{\circ} 29'$  West; and for the development of a shoal sounding at latitude  $55^{\circ} 46'$  North, longitude  $159^{\circ} 24'$  West. The turning radius of the launches is approximately 20 meters at sounding speed. Launch No. 2 was employed for two leading soundings in an effort to obtain the shallowest depth in a shoal near the Cannery wharf at the North end of Ivanof Bay.

**D. TIDE AND CURRENT STATIONS:**

Data obtained from the Kupreanof Harbor portable tide gage, latitude  $55^{\circ} 47.40'$  North, longitude  $159^{\circ} 21.05'$  West, and Ivanof Bay portable tide gage, latitude  $55^{\circ} 54.00'$  North, longitude  $159^{\circ} 29.30'$  West, were used to

reduce soundings on this sheet. Since no time or range correction were found necessary between these gages, the data were used interchangeably where absence of records at either station made it necessary. Generally, reducers for the soundings in the upper portion of Ivanof Bay were obtained from the Ivanof Bay gage and those for the southern portion of the inside passage were obtained from the Kuprejanof Harbor gage. No current stations were occupied.

E. SMOOTH SHEET:

The smooth sheet projection was made by the Seattle Processing Office by hand. The shoreline and topographic detail were penciled and verified by the Seattle Processing Office in accordance with paragraph 757 of the Hydrographic Manual.

F. CONTROL STATIONS:

The positions of the triangulation stations used for control on this sheet were obtained from the "List to Geographic Positions of Triangulation Stations Anchorage to Attu Island, Alaska, Volume V". All topographic signals on this survey were located by planetable graphic control. (See Topographic Descriptive Report, SURVEYOR, 1952, Field Sheets Nos. A and B). For a discussion of accuracy of locations and comparisons with identical points as shown on the film positives of topographic manuscripts refer to the Topographic Descriptive Report, SURVEYOR, 1952. All locations were considered accurate for good position location of soundings. (See letter /10 November 1952, attached).

G. SHORELINE AND TOPOGRAPHY:

*T-8829 (41'45'46)*  
The shoreline and topographic detail were obtained from the photographic compilation sheets T-8830, T-8831, and T-8832. The cannery at the head of Ivanof Bay is in the process of expansion and buildings are being erected to the east of those now shown on T-8831. Generally the shoreline and location of off-lying rocks is very good. (See discussion of shoreline variations in the Topographic Descriptive Report, SURVEYOR, 1952). No discrepancies in the location of off-lying rocks as shown on the T sheets and the boat sheet were noted. This should be checked upon completion of the smooth sheet.

It was impractical to delineate the low water line on this sheet except in the vicinity of the sand beaches because the shoreline is generally littered with boulders and off-lying rocks which could not be approached without danger to life and property. Except for the heads of bays and the more prominent bights, the shoreline is steep, bold, and rocky.

H. SOUNDINGS:

All soundings were taken with an 808 J Depth Recorder equipped with tachometer reeds calibrated for a velocity of 800 fathoms per second. Standard methods to determine initial, index, phase, and tide corrections were followed.



A leadline was used for drift leading, obtaining shoal depths and bottom samples. All soundings obtained with the leadline were recorded in fathoms and tenths.

I. CONTROL OF HYDROGRAPHY:

Standard methods for visual controlled hydrography were used throughout the survey of this sheet.

J. ADEQUACY OF SURVEY:

The survey of this sheet is complete and adequate to supersede prior surveys for charting.

The junctions with adjoining surveys are satisfactory and the depth curves can be adequately drawn at the junctions.

No nonstandard depth curves were used on this sheet.

*A few least depths are encircled in brown and dashed curve colors for emphasis*

K. CROSSLINES:

Approximately eight percent of the lines run were crosslines. An examination of the boat sheet indicates that all soundings at crossings are satisfactory and fall within the requirements of Paragraphs 3571 and 7771 of the Hydrographic Manual.

L. COMPARISON WITH PRIOR SURVEYS:

Comparison with prior surveys H-7169, 1:80,000 (1946); H-7170, 1:20,000 (1946); and H-3722, 1:100,000 (1914) Reconnaissance and the boat sheet were satisfactory.

M. COMPARISON WITH CHART:

Comparisons with chart 8859 and the boat sheet were satisfactory.

N. DANGERS AND SHOALS:

There are no new dangers or shoals found on this sheet.

There are no reported uncharted dangers or shoals.

There are no charted dangers or shoals on which the least depths are less than these found on the new survey.

All charted dangers, shoals, and bare rocks were found as charted, or, shoaler depths were found.

O. COAST PILOT INFORMATION:

The general description of this area as given in Coast Pilot, Part II - Yakutat Bay to Arctic Ocean, pages 300-303, is satisfactory. The area is generally free of dangers except those noted.

DETAILED COAST PILOT NOTES ARE AS FOLLOWS:

- Page 300 - Lines 36 and 37. Delete sentence beginning "The cannery".
- Page 300 - Lines 38 and 39. Change last sentence to: "A dilapidated wharf that is usable above half tide level by small boats is located in this cove."
- Page 300 - Lines 40 and 41. Delete "anywhere in an area, 1 mile in diameter."
- Page 300 - Lines 42 and 43. Change sentence beginning "In anchoring" to read: "In anchoring avoid the mud flats on the eastern side of the bay because they rise abruptly from 10 fathoms."
- Page 300 - Line 46. Delete all.
- Page 301 - Lines 1 and 2. Delete all.
- Page 301 - Lines 3 and 4. Change to read: "A rock having points bares 1 to 3 feet at MLLW is 740 yards 130° from - - - ."
- Page 301 - Lines 4 and 5. Change to read: "A rock which bares 2 feet at MLLW is 660 yards off the east shoreline, 1772 yards 072° from the - - - ."
- Page 301 - Line 6. For "1½ fathoms" substitute "1 fathom".
- Page 301 - Lines 7 and 8. For "136 yards 215°" substitute "147 yards 219°". Insert "cannery" between "the" and "wharf". Delete sentence beginning "The shoal - - - ."
- Page 301 - Lines 15 to 20. Delete all after "John Island" and insert "Depth of 12 to 15 fathoms can be carried through the western channel. The channel west of the island carries a depth of 18 fathoms through, but rocks off the east shore of John Island and off the east shore of the bay make this channel dangerous for strangers to navigate unless undertaken at low tide when the rocks are bare and can be seen."
- Page 301 - Lines 21 to 33. Delete all and insert: "From a point 1.4 miles west of Alexander Point, steer 337° until the south point of John (Road) Island is 440 yards on the starboard beam, thence 353° 0.9 mile where the north point of John (Road) Island is 570 yards on the starboard beam. Here

change course to  $14^{\circ}$  to the end of the cannery wharf, taking care to avoid sunken rock 147 yards off southwestern corner of wharf.

From a point 1.5 miles west of Alexander Point, steer  $336^{\circ}$  until the small grass-topped islet two miles north of Alexander Point is 0.6 mile on the starboard beam, thence  $0^{\circ}$  until the north end of John (Road) Island is 0.5 mile on the port beam. Change course to  $334^{\circ}$  true until the highest islet on the west side of the upper bay is 1.0 mile on the port beam, thence  $14^{\circ}$  true to the end of the cannery wharf but avoiding the sunken rock near its southwestern corner."

Page 302 - Line 47. After "passed on", delete all and substitute:  
"the west side in depths of from 23 to 37 fathoms and on the east side in depths of from 32 to over 50 fathoms. A shoal having a least depth of 18 fathoms lies 1 mile  $15^{\circ}$  from the island."

Page 303 - Lines 1 and 2. Delete all.

Page 303 - Lines 11 and 12. Delete sentence beginning "The wreck - -".

P. AIDS TO NAVIGATION: ✓

There are no aids to navigation, ferry routes, bridges, submarine cables, telegraph or telephone lines in this area. (see 1951 Report)

Q. LANDMARKS FOR CHARTS: ✓

There are no new landmarks for charts on this sheet. (see 1951 Report)

R. GEOGRAPHIC NAMES: ✓

No new names appear on this sheet. A discrepancy in names was noticed while working on this sheet. The island at the south end of Ivanof Bay is called Road Island on C. & G. S. chart 8859. This island is called John Island on the topographic manuscript, in the triangulation done in this area in 1946, and in the Geographic Dictionary of Alaska by Baker ("so called by Dall, 1880"). No information was obtained from local inhabitants as to what the island was called. The name ~~John~~ Island is used on this sheet.

Road

Use Road Island

see 1951 D.R. H. 7923 ✓

S. SILTED AREAS: ✓

No silted areas were noted on the fathograms.

T. BY-PRODUCT INFORMATION: None.

U - Y. MISCELLANEOUS: None.

Z. TABULATION OF APPLICABLE DATA:

The following items have been or will be forwarded to the Washington Office:

Fathometer Report  
Coast Pilot Notes  
Landmarks for Charts

*Filed with 11-7999*  
~~Not yet submitted~~ *Submitted 5 Nov. 1952*  
Submitted 5 November 1952  
Not yet submitted

Respectfully submitted:

*John C. Bull*  
John C. Bull  
Comdr., USC&GS

Forwarded:

*J. C. Bose*  
J. C. BOSE, Comdr., USC&GS  
Comdg., USC&GS SURVEYOR

C O P Y

USC&GS SURVEYOR, 705 Federal Office Bldg., Seattle 4, Washington

10 November 1952

To: Director, U. S. Coast and Geodetic Survey  
Department of Commerce Building  
Washington 25, D. C.

Subject: Changes in Signal Location, Survey H-7923.

The locations of two signals used in the smooth plot of H-7923 for the 1951 work were moved by the 1952 graphic control.

Signal IDA in latitude  $55^{\circ} - 45.4'$  longitude  $159^{\circ} - 29.9'$  which is shown on the topographic manuscript No. T-8832 as photo-hydro location No. 3204, was moved southeasterly about fifteen meters by the graphic control work.

*lat.  $55^{\circ} - 42.35'$  & long.  $159^{\circ} - 32.9'$*   
Signal GEM (Pinnacle 6, 1946) was moved about thirty meters southerly by the graphic control. The no-check triangulation position was evidently erroneously derived from a false intersection. The radial plot of this signal on T-8832 verifies the graphic control location.

*G.C. positions  
of IDA &  
GEM used  
on S.S. &  
hydro. reported  
where needed*  
✓

These two signals were used in the one-angle shoran arc method of launch location in the area east of the line from Alexander Point through Leader Island and from latitude  $55^{\circ} - 40'$  northward to Alexander Point. The number of positions involving these two signals is not known since the record books for this portion of the survey are still in Washington.

Information is requested as to whether the changes in position of the soundings be accomplished when the 1952 work is plotted or in the event that but few positions are involved, the work be left until the survey is verified.

J. C. BOSE  
Cdr., USC&GS  
Commanding, USC&GS SURVEYOR

C O P Y

839-bdh

19 November 1952

To: Commanding Officer  
USC&GSS Ship SURVEYOR  
705 Federal Office Building  
Seattle 4, Washington

Subject: New positions for signals on H-7923

Reference is made to your letter of 10 November 1952, regarding new positions for signals IDA and GEM on H-7923.

Several sounding positions affected by the revised signal positions have been check-plotted on the film negative containing the 1951 work on this survey. Revised positions would fall within the limits of the sounding figures now plotted.

Inasmuch as only a few positions may require replotting, this work will be done when the survey is verified.

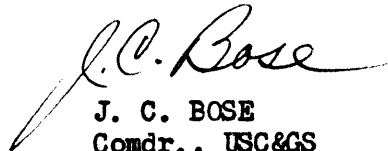
/s/ Robert W. Knox  
Acting Director

APPROVAL SHEET

The smooth sheet, sounding volumes, and fathograms have been given a final inspection of a general nature and are approved.

The boat sheet was inspected at the end of each day's work while the field work was in progress.

I consider the survey adequate and complete except for a leadline examination of the shoal in latitude  $55^{\circ} 48.3' N$ , longitude  $159^{\circ} 27.57' W$ , which will be accomplished in 1953.



J. C. BOSE  
Comdr., USC&GS  
Comdg., USC&GSS SURVEYOR

H 7923 (Additional work)  
Su 2151

Alaska Peninsula  
Ivanof Bay and vicinity.

Processing Office Notes .

General statement.

About half of this sheet was surveyed in 1951. The part eastward of a line running SSW from Alexander Point thru Leader Island was completed, except for a few cross lines and some development work done in 1952. Ivanof Bay and the area south of it was surveyed in 1952.

The sounding records of 1951 are numbered 1 to 14, and those of 1952 are 15 to 26. A complete report was prepared for the 1951 survey. The smooth sheet was prepared by the Seattle Processing Office. The first season's work was plotted by the field party. All records were sent to Washington.

For plotting the 1952 survey the smooth sheet was returned to the SURVEYOR. The field party plotted the positions and the Processing Office added the soundings.

Shoreline.

The shoreline is from film positive copies of T 8829, 8830, 8831 and 8832. These sheets were prepared from inspected photographs. The smooth sheet was compared with the film positives as it was inked. The smooth sheet was compared with the boatsheet also for rocks, etc. added by the hydrographer.

Shoals.

Shoal soundings have been indicated by leaders and the position numbers and least depths noted.

Depth curves.

These contours are in agreement with H 7996 along the junction with that sheet at the southwest part of the sounded area.

Pier - Ivanof Bay Cannery.

This wharf is shown in a box on scale of 1/ 1 000. It lays in a misleading north-south position. The azimuth of the wharf is 160° 10'. This has been noted along the wharf to prevent errors.

E. J. Smith  
Cart. Engr.

E. Smith  
5/28/53



H 7923  
Su 2151

Alaska Peninsula  
Kupreanof Peninsula to Paul I.

List of geographic names  
penciled on smooth sheet.

Alaska Peninsula

Alexander Point.

Coal Point.

Egg Island.

Fox Cape

Humpback Bay.

Ivanof Bay.

Jacob Island.

Kupreanof Harbor.

Kupreanof Peninsula.

Leader Island

Noon Point

Paul Island.

(See list on Form M-234)



Supplemental DESCRIPTIVE REPORT to Accompany  
HYDROGRAPHIC SURVEY H-7923 (FIELD NO. SU-2151)

Alaska Peninsula, South Side Southwest Alaska

Scale - 1:20,000

1953

J. C. Bose, Chief of Party

USC&GSS SURVEYOR Launches No. 3 & 4  
F. X. Popper and J. C. Bull, Hydrographers

A. PROJECT:

Original instructions for Project No. CS-344 dated 8 March 1951, and supplemental instructions dated 8 April 1953 to the Commanding Officer, Ship SURVEYOR, were followed. Field work to be protracted by the Washington Office.

B. SURVEY LIMITS AND DATES:

This survey covers the development of shoals along the east side of Ivanof Bay and the north side of Humpback Bay, as required by the supplemental instructions dated 8 April 1953, listed as follows:

<u>Latitude</u>	<u>Longitude</u>
55° - 51.2'	159° - 20.8'
53.3'	21.6'
52.25'	22.0'
48.63'	27.57'

C. VESSELS AND EQUIPMENT:

Field work was done on 3 September 1953 from Launch No. 3 with Lt. Comdr. F. X. Popper in charge and Launch No. 4 with Comdr. J. C. Bull in charge.

Model 808 depth recorders were used on both launches, No. 47-S on Launch No. 3 and No. S-110 on Launch No. 4.

Fathometer data and corrections for this work will be found in the Fathometer Report, Ship SURVEYOR, 1953, Project CS-344. *Filed with H-8045*

D. TIDE AND CURRENT STATIONS:

Reference is made to the Director's letter, file number 36-rjb, dated 24 September 1953, which stated that the observed tides from the Sand Point, Alaska, gage were to be used, and that no corrections were necessary for height or time differences. Hourly heights were supplied by the Washington Office.

E. SMOOTH SHEET:

The development done in 1953 is to be plotted by the Washington Office. Reference Director's letter, file No. 22/MEK, S-1-SU, dated 12 January 1954.

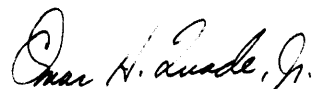
F. CONTROL STATIONS:

All signals used for hydrography were 1951 or 1952 stations, recovered in 1953, except existing triangulation of an earlier date. No stations were visited.

A list of signals used and their source will be found in Vol. No. 27.


G through Z. Not applicable or no change.

Respectfully submitted:



Omar H. Quade, Jr.  
Lieut. (j.g.), USC&GS

Forwarded:



Henry J. Healy  
Commander, USC&GS  
Comdg., USC&GSS SURVEYOR

STATISTICS FOR HYDROGRAPHIC SURVEY H-7923 (1953)  
 USC&GSS SURVEYOR

CS-344

Vessel	Day Letter	Volume Number	Date	H.L. or W.S.	Number of Positions	Statute Miles of Sounding
Launch No. 3	ca	27	3 Sept. 1953	0	57 ✓	8.4
Launch No. 4	m	28	3 Sept. 1953	3	29 ✓	2.0
1953 total				3	86	10.4

c o p y

36-rjb

24 September 1953

To: The Commanding Officer  
U.S.C. & G.S. Ship SURVEYOR  
705 Federal Office Building  
Seattle 4, Washington

Subject: Tide data, Alaska

With further reference to your letter of 10 September 1953 there are enclosed for the periods listed hourly heights for the reduction of soundings in the area of Sheets H-7998, H-7997, H-7996 and H-7923. These heights are based on observed tides at Sand Point and can be used as tide reducers without further correction for either time or height of tide.

/s/ Robert W. Knox  
Acting Director

Enclosures

c o p y

22/MEK  
S-1-SU

12 January 1954

To: Commanding Officer  
USC&GS Ship SURVEYOR  
705 Federal Office Building  
Seattle 4, Washington

Via: Supervisor, Northwestern District

Subject: Plotting 1953 Field Work on Hydrographic  
Sheets Completed in Previous Years

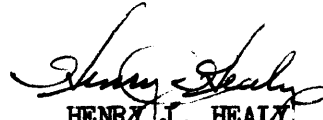
In reply to your letter of 8 January 1954 the 1953 field work accomplished on hydrographic sheets H-7923, H-7996, H-7997 and H-7998 will be plotted by the Washington Office. The field records for the work on these sheets shall be sent to the Washington Office.

/s/ Robert W. Knox  
Acting Director

cc. Supervisor, Northwestern District  
Chief, Nautical Chart Br., Chart Div.

APPROVAL SHEET

The additional work on this sheet was accomplished under the direction of CDR. J. C. Bose. The records for this additional work are complete. The additional work adequately covers the instructions and should be considered complete.



HENRY J. HEALY  
Commander, USC&GS  
Comdg. USC&GSS SURVEYOR



GEOGRAPHIC NAMES

Survey No. H-7923

Name on Survey	Source										
	A	B	C	D	E	F	G	H	K		
<u>Alaska</u>											1
<u>Alaska Peninsula</u>										B.H.	2
											3
<u>Coal Point</u>											4
<u>Humpback Bay</u>											5
<u>Alexander Point</u>										R.G.N.	6
<u>Road Island</u>										(not John I.)	7
<u>Ivanof Bay</u>											8
<u>Kupreanof Peninsula</u>											9
<u>Jacob Island</u>											10
<u>Paul Island</u>											11
<u>Egg Island</u>											12
<u>Kupreanof Harbor</u>										(location of tide gage)	13
											14
											15
											16
											17
<u>Additional work</u> 1952											18
<u>Noon Point</u>											19
<u>Leader Island</u>											20
<u>Fox Cape</u>											21
											22
											23
											24
											25
											26
											27

Names under lined in red are approved

4-25-52  
L. Heek

Names approved  
6-25-53  
L. Heek

RHC

TIDE NOTE FOR HYDROGRAPHIC SHEET

~~DIVISION OF HYDROGRAPHY AND TOPOGRAPHY~~

29 April 1952

Division of Charts: R. H. Carstens

Plane of reference approved in 14  
volumes of sounding records for

HYDROGRAPHIC SHEET 7923

Locality Alaska Peninsula, Southwest Alaska

Chief of Party: G. E. Boothe in 1951  
Plane of reference is mean lower low water, reading  
2.5 ft. on tide staff at Kupreanof Harbor  
13.4 ft. below B. M. 1 (1914)

Height of mean high water above plane of reference is 6.9 feet.

Condition of records satisfactory except as noted below:

*E. C. McKay*  
*Section*

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

RHC

## TIDE NOTE FOR HYDROGRAPHIC SHEET

~~Division of Coastal Surveys~~

30 June 1953

Division of Charts: R. H. Carstens

Plane of reference approved in 12  
volumes of sounding records for

HYDROGRAPHIC SHEET 7923 (Add. Wk.)

Locality Alaska Peninsula (South Side)

Chief of Party: J. C. Bose in 1952

Plane of reference is mean lower low water, reading

5.1 ft. on tide staff at Ivanof Bay

15.1 ft. below B. M. 1 (1952)

4.2 ft. on tide staff at Kupreanof Harbor

13.2 ft. below B. M. 1 (1914)

Height of mean high water above plane of reference is 6.9 feet.

Condition of records satisfactory except as noted below:

*E. C. McKay*  
Section of Tides

Chief, Division of Tides and Currents.

RHC

TIDE NOTE FOR HYDROGRAPHIC SHEET

~~Division of Coastal Surveys~~

10 February 1954

Division of Charts: R. H. Carstens

Plane of reference approved in  
2 volumes of sounding records for

HYDROGRAPHIC SHEET 7923 Add. Wk.

Locality South Side of Alaska Peninsula

Chief of Party: J. C. Bose in 1953  
Plane of reference is mean lower low water, reading  
4.0 ft. on tide staff at Sand Point  
18.5 ft. below B. M. 5 (1943)

Height of mean high water above plane of reference is 6.5 feet.

Condition of records satisfactory except as noted below:

*E. C. McKay*  
Section of Tides  
Chief, Division of Tides and Currents.

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. H-7923....

Records accompanying survey:

Boat sheets <sup>✓</sup>1-2 Parts(1953) <sup>✓</sup>2(1953) <sup>✓</sup>12(1952) <sup>✓</sup>14(1951) wire drag vols. ....; bomb vols. ....; graphic recorder rolls <sup>✓</sup>10 Env.(1951) & <sup>✓</sup>9 Env.(1952) special reports, etc. <sup>✓</sup>1 Smooth Sheet; <sup>✓</sup>1 Tracing; <sup>✓</sup>1 Descriptive Report; Bathometer Report (Original and <sup>✓</sup>1 Copy); <sup>✓</sup>1 Descriptive Report 1952 filed with Descriptive Report for 1951; <sup>✓</sup>1 Descriptive Report for 1953—filed with 1951 & 1952

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

Number of positions on sheet	.....	6,139
Number of positions checked	.....	375* (6%)
Number of positions revised	.....	27
Number of soundings revised (refers to depth only)	.....	361
Number of soundings erroneously spaced	.....	27
Number of signals erroneously plotted or transferred	.....	2
Topographic details	Time	46 hrs
Junctions	Time	18 hrs
Verification of soundings from graphic record	Time	19 hrs

Verification by *Gordon J. Thompson* Total time 369 Date 19 Nov 54

Reviewed by *A. P. STIRNI* Time 56 hrs Date 21 Dec 54

\* includes 86 positions plotted during verification (1953 work)

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-7923

FIELD NO. SU-2151

Alaska, Alaska Peninsula - South Side, Ivanof and Humpback Bays

Project No. CS-344

Surveyed - May, Sept., 1951 - May, June 1952 - Sept., 1953

Scale 1:20,000

Soundings:

Control:

808 Fathometer  
Leadline

Sextant fixes on  
shore signals

Sextant angles and  
Shoran distances

Chief of Party - G. E. Boothe, J. C. Bose  
Surveyed by - E. F. Hicks, R. H. Tryon, R. F. Lanier, W. R. Kachel  
C. W. Mooney, J. C. Bull and F. X. Popper  
Protracted by - R. F. Lanier, J. D. Hodges and G. J. Thompson  
Soundings plotted by - W. R. Kachel, C. E. Pedersen and G. J.  
Thompson  
Verified and inked by - G. J. Thompson  
Reviewed by - A. R. Stirni 12/21/54  
Inspected by R. H. Carstens

1. Shoreline and Signals

The shoreline originates with reviewed manuscripts of air-photographic surveys T-8829 (1941,45,46), T-8830 (1941,45), T-8832 (1941,42) and an advance print of unreviewed survey T-8831 (1947).

Signals used to control the hydrography executed in 1952 were located on Graphic Control sheets Su-A-52 and SU-B-52. The remaining signals are photo-hydro signals located on air-photographic surveys T-8829 and T-8830, and signals located from sextant cuts taken by the hydrographic party.

Graphic Control surveys SU-A-52 and SU-B-52 are marked for destruction. All applicable information thereon has been transferred to the present survey.

2. Sounding Line Crossings

Depths at sounding line crossings are in good agreement.

3. Depth Curves and Bottom Configuration

The shoreline throughout most of the area of the survey is rugged and foul with boulders and off-lying rocks. Because of the foul nature of inshore areas depth curves of 5 fms and less are generally not completely developed except in a few bights where sand beaches permitted access for inshore hydrography. Considerable offshore bottom irregularity occurs where shoals and knolls rise abruptly from an otherwise smooth, undulating bottom.

4. Junctions with Contemporary Surveys

Adequate junctions are effected with contemporary hydrographic surveys H-7927 (1951) on the southeast, H-7996 (1952-53) on the southwest and H-7924 (1951) on the northeast.

5. Comparison with Prior Surveys

H-3715 (1914), 1:10,000  
H-3722 (1914), 1:100,000

H-7169 (1946), 1:80,000  
H-7170 (1946), 1:80,000

Scattered lines on these prior reconnaissance surveys cover parts of the area of the present survey. No important differences with the present survey are noted except for the 24 and 25 fm. soundings on H-7196 in lat.  $55^{\circ}44'$ , long.  $159^{\circ}27'$ , which fall in present depths of 42-50 fms. The 24- and 25-fm. soundings are on a weakly controlled line and should probably fall in comparable depth 0.4 mile to the northwest on the present survey.

The present survey is adequate to supersede the prior surveys within the common area.

6. Comparison with Chart 8859 (Latest print date 8/16/54)A. Hydrography

The charted hydrography originates with the 1951 and 1952 work of the present survey prior to verification and review. The 1953 work consisted of development on several shoals. Charted depths are in adequate agreement with the survey depths.

B. Aids to Navigation

Paul Island Light and buoy N2 are the only aids in the survey area. Paul Island Light is a triangulation station. The charted location of buoy N2 is in substantial agreement with the survey position and adequately marks the feature intended.

7. Condition of Survey

- A. The sounding records and Descriptive Report are complete and comprehensive.
- B. The smooth plotting was accurately done.
- C. Fifty hours were spent by the verifier applying corrections to five volumes of soundings. These corrections were attributed to the use of a stylus arm of incorrect length on fathometer 47-S. The determination of the correction factors is discussed in the review of H-7924, which adjoins the present survey.

8. Compliance with Project Instructions

The survey adequately complies with the Project Instructions.

9. Additional Field Work

This is a good basic survey and no additional field work is recommended. As a matter of record it is noted that the knolls indicated by the 35-fm. sounding in lat.  $55^{\circ}46.38'$ , long.  $159^{\circ}27.8'$  and the 40-fm. sounding in lat.  $55^{\circ}46.55'$ , long.  $159^{\circ}26.7'$  were not developed on the present survey.

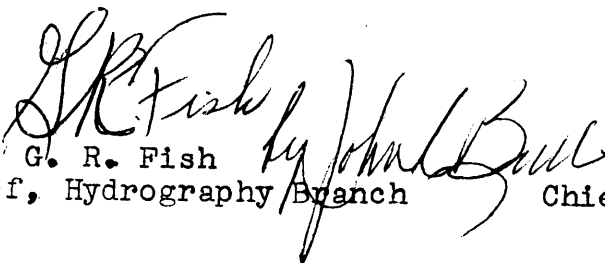
Examined and Approved:



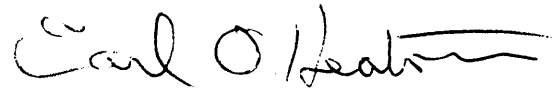
H. R. Edmonston  
Chief, Nautical Chart Branch



E. R. McCarthy  
Acting Chief, Chart Division

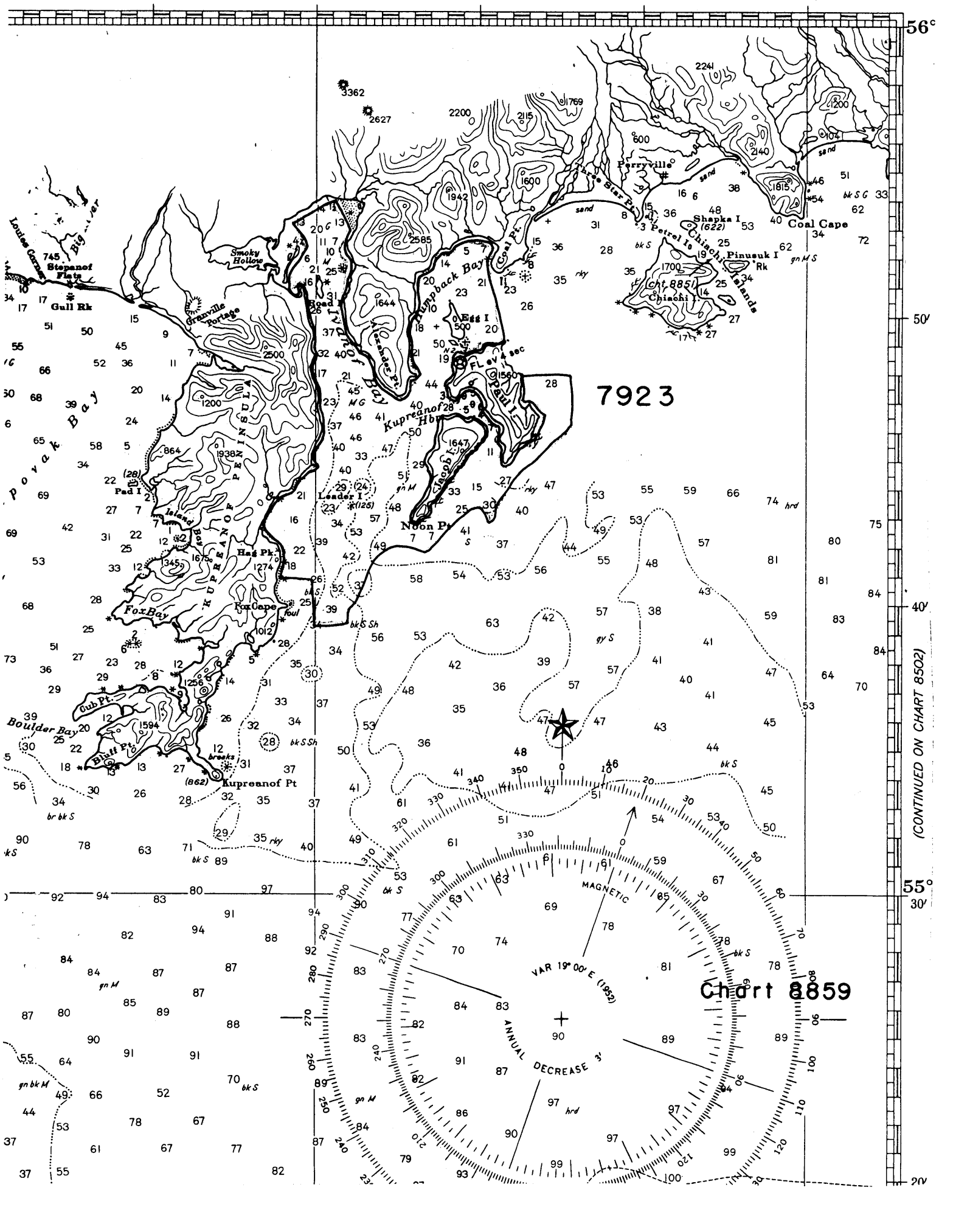


G. R. Fish  
Chief, Hydrography Branch



Earl O. Heaton  
Chief, Division of Coastal Surveys





7923

Chart 8859

MAGNETIC  
 VAR 19° 00' E (1982)  
 ANNUAL DECREASE 3'

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

TOPOGRAPHIC TITLE SHEET

Each Topographic and Graphic Control Sheet, and each Air Photographic Drawing should be accompanied by this form, completed so far as practicable, when forwarded to the Washington office.

REGISTRY No. ....

Field No. SU-A-52 .....

Scale 1:20,000 .....

State Alaska ..... General locality Alaska Peninsula - South Side .....

Specific locality Ivanof Bay .....

Dates: Survey began May 1952 ..... Completed May 1952 .....

Photography ....., Supplemented by ground surveys to .....

Project No. CS-344 ..... Instructions dated 8 March 1951 .....

Vessel } or SURVEYOR ..... Chief of party J. C. Bose .....

Field work by D. H. Konichek ..... Office work by D. H. Konichek .....

Final inking by D. H. Konichek .....

Ground elevations } in feet above { M. H. W.  
Treetop elevations } or { .....

Contours } by { Planetable } Interval ..... ft.  
Approximate contours } Multiplex }  
Form lines } .....

REMARKS All applicable data transferred to H-7923 .....

Declinatoire reading at Δ Spit 1914 - 19°12'E - 1115, 17 May 1952

Δ Poed 1946 - 15°52'E - 1700, 16 May 1952

Δ Boot 1946 - 19°44'E - 1210, 16 May 1952

Δ Shoe 1946 - 20°00'E - 1515, 16 May 1952

Δ Told 1946 - 19°12'E - 1115, 19 May 1952

12/20/54 - ARS-

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

TOPOGRAPHIC TITLE SHEET

Each Topographic and Graphic Control Sheet, and each Air Photographic Drawing should be accompanied by this form, completed so far as practicable, when forwarded to the Washington office.

REGISTRY No. ....

Field No. SU-B-52.....

Scale 1:20,000.....

State Alaska..... General locality Alaska Peninsula - South Side.....

Specific locality Ivanof Bay.....

Dates: Survey began May 1952..... Completed June 1952.....

Photography....., Supplemented by ground surveys to .....

Project No. CS-344..... Instructions dated 8 March 1951.....

Vessel } or SURVEYOR..... Chief of party J. C. Bose.....  
Party }

Field work by D. H. Konichek..... Office work by D. H. Konichek.....

Final inking by D. H. Konichek.....

Ground elevations } in feet above { M. H. W.  
Treetop elevations } or { .....

Contours } by { Planetable } Interval ..... ft.  
Approximate contours } Multiplex }  
Form lines }

REMARKS All applicable data transferred to H-7923......

Declinatoire reading at Δ Apple 1945 - 18°30'E - 1027, 26 May 1952

Δ Noon 1945 - 19°38'E - 1347, 26 May 1952

Δ Leader 1944 - 19°28'E - 0950, 29 May 1952

12/20/54 - ARS -

# 7923

## TIDE NOTE

1952

Two tide gages were used to reduce the soundings on this sheet. The Kupreanof Harbor portable tide gage located at latitude  $55^{\circ} 47.40' N$ , longitude  $159^{\circ} 21.05' W$ , MLLW on staff 4.2 feet, and the Ivanof Bay portable tide gage located at latitude  $55^{\circ} 54.00' N$ , longitude  $159^{\circ} 29.30' W$ , MLLW on staff 5.1 feet.

# 7923

C O P Y

Refer to No. 36-rcb

AIR MAIL

8 September 1952

To: The Commanding Officer  
U.S.C. & G.S. Ship SURVEYOR  
705 Federal Office Building  
Seattle 4, Washington

Subject: Tide Data, Alaska

Tide data requested in your letter of 27 August 1952 are as follows:

Station	MLLW Feet 1952 staff	MTL Feet 1952 staff	Mean Range Feet
Kupreanof Hbr.	4.2	8.3	5.6
Ivanof Bay	5.1	9.2	5.6
Fox Bay	3.6	7.7	5.5
Dent Point (staff #1)	2.5	6.5	5.4
(staff #2)	3.5	7.5	

In verification of the preliminary computations referred to in your letter, office computations show little difference in time or range of tide at these stations. Therefore, it will not be necessary to indicate areas to be controlled by the different gages. Tide reducers may be taken from the nearest gage. In case of missing or defective record at any station the records at the other station may be considered interchangeable without modification in either time or height.

/s/ F. L. Gallen  
~~XXXXXXXX~~  
Acting Director

