8158

Diag. Cht. No. 8700.

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. SU-2.5/254 Office No. H-8158

LOCALITY

State Alaska

General locality Shumagin Islands

Locality West of Unga Island

194 54

CHIEF OF PARTY

F. G. Johnson

LIBRARY & ARCHIVES

DATE May 22, 1957

B-1870-1 (1)

8158

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-8158

Field No. SU-2-5/254

State Alaska

General locality Shumagin Islands

Locality West of Unga Island

Scale 1:25000 Date of survey 28 July - 18 Sept. 1954

Instructions dated 25 January 1954 (Ref. 22/MEK, S-2-SU)
24 February 1954 (Ref. 22/SRO, S-2-SU)

Vessel Ship SURVEYOR, Launches 1, 3 & 4

Chief of party Frank G. Johnson, Commander, USC&GS

Surveyed by F. R. Gossett, V. R. Sobieralski, M. J. Tonkel, S. L. Hollis

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

Fathograms scaled by Ship officers as indicated on individual fathograms

Fathograms checked by Ship officers as indicated on individual fathograms

Protracted by P. A. Stark, E. R. Stone

Soundings penciled by L. W. Eason II (Seattle District)

Soundings in fathoms ~~XXXX~~ at ~~MMMW~~ MLLW and are based on a velocity of sound of 800 fms./sec.

REMARKS: Smooth Sheet projection prepared in the Washington Office. ~~Shoreline and Control transferred by Seattle Processing Office. Positions plotted aboard the Ship SURVEYOR after which this sheet sent to the Seattle Processing Office for completion.~~

U. S. GOVERNMENT PRINTING OFFICE 777032

DESCRIPTIVE REPORT to Accompany HYDROGRAPHIC SURVEY H-8158 (1954)
(Field No. SU-2.5/254)

ALASKA PENINSULA - SOUTH SIDE

Project CS-344
Scale: 1:25000

USC&GS Ship SURVEYOR
E. G. Johnson, Chief of Party

A. PROJECT -

Original INSTRUCTIONS for Project CS-344 dated 8 March 1951. The authority for this survey (1954 field season) is contained in the Directors INSTRUCTIONS to the Commanding Officer, Ship SURVEYOR, Ref. 22/MEK, S-2-SU dated 25 January 1954 and Ref. 22/SRO, S-2-SU dated 24 February 1954.

B. SURVEY LIMITS AND DATES -

North Limit: The 55° 16' N parallel making junction with contemporary Survey H-8157.(1954)
East Limit: The west shore of Unga Island.
South Limit: The 55° 04' N parallel making junction with prior Survey H-6774 (1942) and H-3716.(1914)
West Limit: The 161° 07' W meridian joining the contemporary Survey H-8159.(1954-55) & H-8089 (1955)

Field work on this survey began on 28 July 1954 and ended on 18 September 1954.

C. VESSELS AND EQUIPMENT -

This survey was made by the Ship and Launches 1, 3 and 4. All Launches operated from the Ship. No soundings were taken at turns and no determination made of turning radii.

For information regarding the Shoran equipment used (monitors, receivers, transmitters, etc.), reference may be made to the REPORT ON SHORAN CALIBRATION, USC&GSS SURVEYOR, 1954 FIELD SEASON.

The major portion of Ship hydrography was done with a Model 808 Fathometer. An Edo Fathometer was also briefly used. The Launches used the Model 808 Fathometer. For a complete list of fathometers used, with respect to model and serial numbers, reference may be made to the 1954 FATHOMETER REPORT, USC&GS Ship SURVEYOR.

D. TIDE AND CURRENT STATIONS -

Tide data was obtained from portable tide gages at Sand Point, listed in TIDE NOTE; Bay Point; and Beaver Bay. A letter from the Office of the Director, dated 1 September 1954 (Ref. 36-rjb) indicated that the tide records of the above three stations could be used interchangeably and without modification of time or range for the determination of tide reducers for the area encompassed by this survey.

No current surveys were made within the limits of this survey

E. SMOOTH SHEET -

The projection was made in the Washington Office presumably by ruling machine. The shoreline and signals were transferred and verified by personnel of the Seattle Processing Office. Transfer was made from Topographic Manuscripts Nos. T-11109, 11110, 11118 and 11119 (1952-54)

At the date of this report, 25 March 1955, the positions in twenty one of the total twenty five Sounding Volumes have been smooth plotted aboard the Ship SURVEYOR. It is expected that all of the positions will be plotted before the Ship sails for Alaska and the smooth sheet is sent to the Seattle Processing Office for completion.

F. CONTROL -

All control stations used in this survey are on the North American Datum of 1927. Control on this sheet includes the following (recovered and occupied) triangulation stations established by J.B.M.: ARCHEDENA 1913; JUDE 1913; KENNOYS 1914; and TRAP 1913. The two Shoran Stations used on this Sheet (BAY and SEAL) were located by triangulation Additional information regarding triangulation may be obtained by reference to TRIANGULATION REPORT, USC&GSS SURVEYOR, Project CS-344, 1954.

Photo-hydro stations were obtained by photogrammetric methods using the Topographic Manuscripts T-11109, 11110, 11118 and 11119. Additional information may be obtained by reference to the PHOTOGRAMMETRIC-SHORELINE REPORT, USC&GSS SURVEYOR, 1954. Plane table traverse was not used.

G. SHORELINE AND TOPOGRAPHY -

Shoreline and topography was obtained by photogrammetric methods using Topographic Manuscripts T-11109, 11110, 11118 and 11119. (1952-54)

A plane table was not used during the 1954 field season.

H. SOUNDINGS -

Soundings were obtained by use of fathometers. Verification of shoals was made by leadline. Additional information available from reference to 1954 Fathometer Report, USC&GSS SURVEYOR.

I. CONTROL OF HYDROGRAPHY -

Visual control was obtained by sextant fixes on signals located by triangulation and photogrammetry.

Two Shoran stations were employed, and in order to obtain better control the sounding lines were made to follow Shoran arcs.

The Shoran was adequately calibrated at the working grounds at both the beginning and end of the field season. *Shoran correctors O.K.*

Simultaneous Shoran and visual fixes were taken in areas where junction occurred between Shoran and visually controlled hydrography (Ship positions 2T-19T dated 14 September, and Launch 4 positions 15h-28h dated 20 August). For purposes of comparison, the visual fixes were converted into terms of Shoran arc and the results tabulated and compared with corresponding Shoran fixes. The results indicated that no appreciable discrepancies existed between the two methods of control.

J. ADEQUACY OF SURVEY -

Based on an inspection of the Boat Sheet, this survey is adequate and complete. However, a final analysis can only be made upon completion of the Smooth Sheet. *Review, HP*

K. CROSSLINES -

Comment pending completion of Smooth Sheet. *Review, HP 2*

L. COMPARISON WITH PRIOR SURVEYS -

No previous surveys in this area. *Review, par. 5.*

M. COMPARISON WITH CHART -

No charted soundings in this area. *Review, HP 6*

N. DANGERS AND SHOALS -

To be completed by Seattle Processing Office. (See copy of letter attached).

O. COAST PILOT INFORMATION -

Coast Pilot information relevant to the area included in this survey was sent to the Washington Office on 17 December 1954. (Pkg. No. 54-17, Coast Pilot Notes, USC&GSS SURVEYOR, 1954)

P. AIDS TO NAVIGATION -

None

Q. LANDMARKS FOR CHARTS -

None recommended in this survey area.

R. GEOGRAPHIC NAMES -

No new names recommended

S. SILTED AREAS -

None

T. BY-PRODUCT INFORMATION -

None

U.-Y. MISCELLANEOUS -

Not applicable

Z. TABULATION OF APPLICABLE DATA -

1. Ltr., Office of the Director - Subj: Tides - dated 1 September 1954; Ref. 3A-rjb.

2. Report on Shoran Calibration, USC&GSS SURVEYOR, 1954 Field Season.

3. 1954 Fathometer Report, USC&GSS SURVEYOR.

4. Triangulation Report, USC&GSS SURVEYOR - Project CS-344, 1954.

5. Photogrammetric Report, USC&GSS SURVEYOR, 1954.

6. Coast Pilot Notes, USC&GSS SURVEYOR, 1954.

Respectfully Submitted
25 March 1955

V. Ralph Sofienalski
for PENTTI A. STARK
LT, USC&GS

TIDE NOTE

Tide data for reduction of soundings was obtained from portable tide gages at:

Sand Point:	Lat 55-20.2N Long 160-30.1W
Bay Point:	Lat 55-19.55N Long 160-50.80W
Beaver Point:	Lat 55-28.35N Long 160-50.35W

A letter from the Office of the Director dated 1 September 1954 (Ref. 36-rjb) indicated that the records of the above three stations could be used interchangeably and without modification of time or range for the determination of tide reducers for the area encompassed by this survey.

STATISTICS FOR HYDROGRAPHIC SURVEY H-8158 (1954)
USC&GSS SURVEYOR

Project CS-344

Day Letter	Vol. No.	Date	H.L. or W.S.	Number of Positions	Statute Miles of Soundings
A	1	7/28/54	0	57	20.9
B	1&2	7/29/54	0	162	56.9
C	2	7/30/54	0	104	39.5
D	2&3	8/2/54	0	98	38.6
E	3	8/3/54	0	59	22.0
F	3&4	8/4/54	0	158	62.7
G	4&5	8/6/54	0	171	77.7
H	5	8/7/54	0	170	65.3
J	6	8/9/54	0	139	54.3
K	6&7	8/10/54	0	203	76.7
L	7	8/14/54	0	4	0.5
M	7&8	8/16/54	0	154	56.9
N	8	8/17/54	0	142	51.3
P	8&9	8/20/54	0	179	66.3
Q	9	8/21/54	0	126	43.6
R	10	8/27/54	0	121	43.8
S	10	8/28/54	0	73	23.1
T	10&11	9/14/54	0	98	34.7
U	11	9/18/54	0	68	22.7
TOTALS				2,280	857.5

LAUNCH #1

Day Letter	Volume No.	Date	Number of Positions	Statute Miles of Soundings
a	1 } 12	8/14/54	137	24.8
b	1	8/20/54	160	41.2
c	2 } 13	8/21/54	94	19.4
d	2	9/14/54	94	22.2
TOTALS			485 ✓	107.6

LAUNCH #3

Day Letter	Volume No.	Date	Number of Positions	Statute Miles of Soundings
a	~~X~~ 14	7/29/54	71 ✓	21.6
b	~~X~~ 14	7/30/54	78 ✓	24.3
c	14 ~~X~~ 2 15	8/2/54	102 ✓	35.5
d	2 15	8/3/54	83 ✓	25.4
e	15 2&3 16	8/4/54	141 ✓	49.2
f	3 16	8/5/54	145 ✓	51.3
g	16 3&4 17	8/6/54	208 ✓	37.4
h	4 17	8/7/54	184 ✓	39.1
j	17 ~~4&5~~ 18	8/14/54	166 ✓	40.5
k	5 18	8/15/54	88 ✓	7.7
l	5 18	8/17/54	8 ✓	1.7
m	18 ~~5&6~~ 19	8/20/54	159 ✓	41.5
n	6 |	8/21/54	36 ✓	8.8
p	6 |	8/24/54	114 ✓	21.8
q	6 |	8/27/54	48 ✓	4.8
r	6 19	8/30/54	40 ✓	6.7
TOTALS			1,671 ✓	417.3

Pencil corrected Vol numbers numerals are the

LAUNCH #4

Day Letter	Volume No.	Date	Number of Positions	Statute Miles of Soundings
a	20 1	7/29/54	21	4.5
b	20 1	8/5/54	66	23.7
c	20-21 1&2	8/6/54	145	52.0
d	21 2	8/7/54	153	45.9
e	21-22 2&3	8/9/54	108	30.3
f	22-23 3&4	8/14/54	163	47.6
g	23 4	8/16/54	125	34.2
h	23 24 4&5	8/20/54	111	22.4
j	24 5	8/21/54	82	18.7
k	24 5	8/24/54	69	18.6
l	24-25 5&6	8/27/54	83	14.6
m	25 6	8/28/54	124	15.3
n	25 6	9/14/54	151	32.8
TOTALS			1,401	360.6

GRAND TOTALS: **No. of Positions - 5,837**

Statute Mi. Sdgs - 1,743.0

approx 30,000 + sdgs

Pencilled numerals are the correct Vol numbers

COPY COPY COPY

USC&GSS SURVEYOR - 705 Federal Office Bldg., Seattle 4, Wash.

File: 703.3/FGJ/wkk

AIR MAIL

4 September 1954

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

Subject: List of least depths

* Corrections by Processing office & Verifier

1. The following preliminary positions of shoals have been * scaled from 1954 boat sheets and reduced from predicted tides. List includes shoals previously reported by radio which were considered as possible dangers to surface navigation. Development has been completed on the following:

5.6 fms. Lat 55° 18.27'N Long 161° 00.20'W
5.3 fms. Lat 55° 17.50'N Long 161° 00.88'W
5.1 fms. Lat 55° 17.32'N Long 161° 00.95'W
0.3 fms. Lat 55° 16.50'N Long 161° 02.13'W
3.9 fms. Lat 55° 16.12'N Long 161° 01.71'W
5.7 fms. Lat 55° 24.90'N Long 160° 59.72'W
4.6 fms. Lat 55° 23.20'N Long 161° 03.02'W
4.5 fms. Lat 55° 23.12'N Long 161° 02.01'W
2.6 fms. Lat 55° 21.13'N Long 160° 37.19'W

} Not applicable to the present survey

8.5 ~~8.2~~ fms. Lat 55° 11.12'N Long 160° 52.42'W
5.9 ~~5.1~~ ~~5.9~~ fms. Lat 55° 10.08'N Long 160° 55.58'W
4.3 ~~3.9~~ fms. Lat 55° 09.30'N Long 161° 06.85'W
6.7 ~~6.4~~ fms. Lat 55° 08.92'N Long 161° 06.08'W
~~5.8~~ ~~5.5~~ fms. Lat 55° 08.82'N Long 161° 07.36'W
10.7 10.0 fms. Lat 55° 07.80'N Long 161° 06.90'W
9.1 ~~8.5~~ fms. Lat 55° 06.98'N Long 161° 05.87'W
11.0 fms. Lat 55° 11.22'N Long 160° 54.03'W (Center group (0.15 mile diam.)
12 ~~14.0~~ fms. Lat 55° 09.82'N Long 161° 06.98'W
13.0 fms. Lat 55° 08.87'N Long 161° 04.41'W
12.0 fms. Lat 55° 08.09'N Long 161° 06.44'W
7.2 ~~7.2~~ fms. Lat 55° 15.87'N Long 161° 02.41'W
8.7 ~~9.0~~ fms. Lat 55° 15.15'N Long 161° 02.67'W)
8.9 ~~9.0~~ fms. Lat 55° 15.06'N Long 161° 02.67'W) Same shoal
~~7.8~~ ~~9.2~~ fms. Lat 55° 15.18'N Long 161° 03.07'W)
11.0 ~~11.9~~ fms. Lat 55° 13.93'N Long 161° 02.75'W

83

13.0 ~~12.0~~ fms. Lat 55° 14.17'N Long 160° 54.45'W
3.8 ~~4.2~~ fms. Lat 55° 12.97'N Long 160° 53.82'W
3.3 ~~3.6~~ fms. Lat 55° 12.60'N Long 160° 55.56'W
5.8 ~~6.0~~ fms. Lat 55° 12.54'N Long 160° 53.60'W
10.8 ~~10.4~~ fms. Lat 55° 11.79'N Long 160° 54.50'W
~~12.0 fms. Lat 55° 10.86'N Long 160° 54.88'W~~
~~ridge~~
11.0 fms. Lat 55° ~~10.98'~~ 11.05'N Long 160° 54.90'W
~~11.0 fms. Lat 55° 10.67'N Long 160° 55.48'W~~ (See Prox. Off. Notes)
15.0 ~~14.0~~ fms. Lat 55° 15.66'N Long 161° 01.18'W
9.7 ~~9.9~~ fms. Lat 55° 15.33'N Long 160° 52.63'W
9.3 ~~9.7~~ fms. Lat 55° 15.79'N Long 160° 52.77'W

2. List of detached shoals not dangerous to surface navigation:

16.0 fms. Lat 55° 18.35'N Long 160° 57.52'W
14.0 fms. Lat 55° 19.24'N Long 160° 55.98'W
15.0 fms. Lat 55° 19.97'N Long 160° 57.37'W
15.0 fms. Lat 55° 18.99'N Long 160° 59.00'W
24.0 fms. Lat 55° 22.88'N Long 160° 53.92'W
} Not applicable to present survey.

23.0 ~~22.0~~ fms. Lat 55° 04.66'N Long 161° 00.19'W
32.0 ~~29.0~~ fms. Lat 55° 04.48'N Long 161° 02.55'W
20.0 fms. Lat 55° 10.76'N Long 161° 00.57'W
18.0 fms. Lat 55° 11.68'N Long 160° 56.27'W

3. List of least depths to date on shoals on which development is not yet completed:

11.0 fms. Lat 55° 15.63'N Long 161° 12.47'W
3.4 fms. Lat 55° 14.91'N Long 161° 16.65'W
8.6 fms. Lat 55° 15.70'N Long 161° 20.80'W
9.2 fms. Lat 55° 16.36'N Long 161° 24.70'W
10.3 fms. Lat 55° 16.52'N Long 161° 25.37'W
11.0 fms. Lat 55° 16.02'N Long 161° 23.80'W
14.0 fms. Lat 55° 15.60'N Long 161° 14.18'W
12.0 fms. Lat 55° 18.20'N Long 161° 23.25'W
15.0 fms. Lat 55° 17.46'N Long 161° 15.21'W
4.8 fms. Lat 55° 14.00'N Long 161° 09.90'W
7.1 fms. Lat 55° 14.03'N Long 161° 10.58'W
14.0 fms. Lat 55° 14.60'N Long 161° 10.77'W
14.0 fms. Lat 55° 14.03'N Long 161° 11.69'W
8.0 fms. Lat 55° 13.44'N Long 161° 14.65'W
0.9 fms. Lat 55° 14.41'N Long 161° 20.20'W
4.9 fms. Lat 55° 14.38'N Long 161° 21.79'W
4.0 fms. Lat 55° 14.33'N Long 161° 22.47'W (Shoal area extends 0.4 miles S.)
5.2 fms. Lat 55° 14.67'N Long 161° 25.93'W
} Not applicable to present survey

6.6 fms. Lat 55° 14.47'N Long 161° 26.23'W
6.5 fms. Lat 55° 14.30'N Long 161° 26.56'W
5.2 fms. Lat 55° 13.94'N Long 161° 24.18'W
5.5 fms. Lat 55° 14.18'N Long 161° 24.96'W
14.0 fms. Lat 55° 14.94'N Long 161° 22.67'W

Not applicable to present survey

4. The four shoals charted on Charts 8700 and 8704 between Jude and Unga Island were not found in the positions charted and these shoals should be deleted from the charts and replaced by the nearby shoals listed in section one (1) of this letter.

/s/ Frank G. Johnson
FRANK G. JOHNSON
CDR., USC&GSS
Commanding Ship SURVEYOR

APPROVAL SHEET

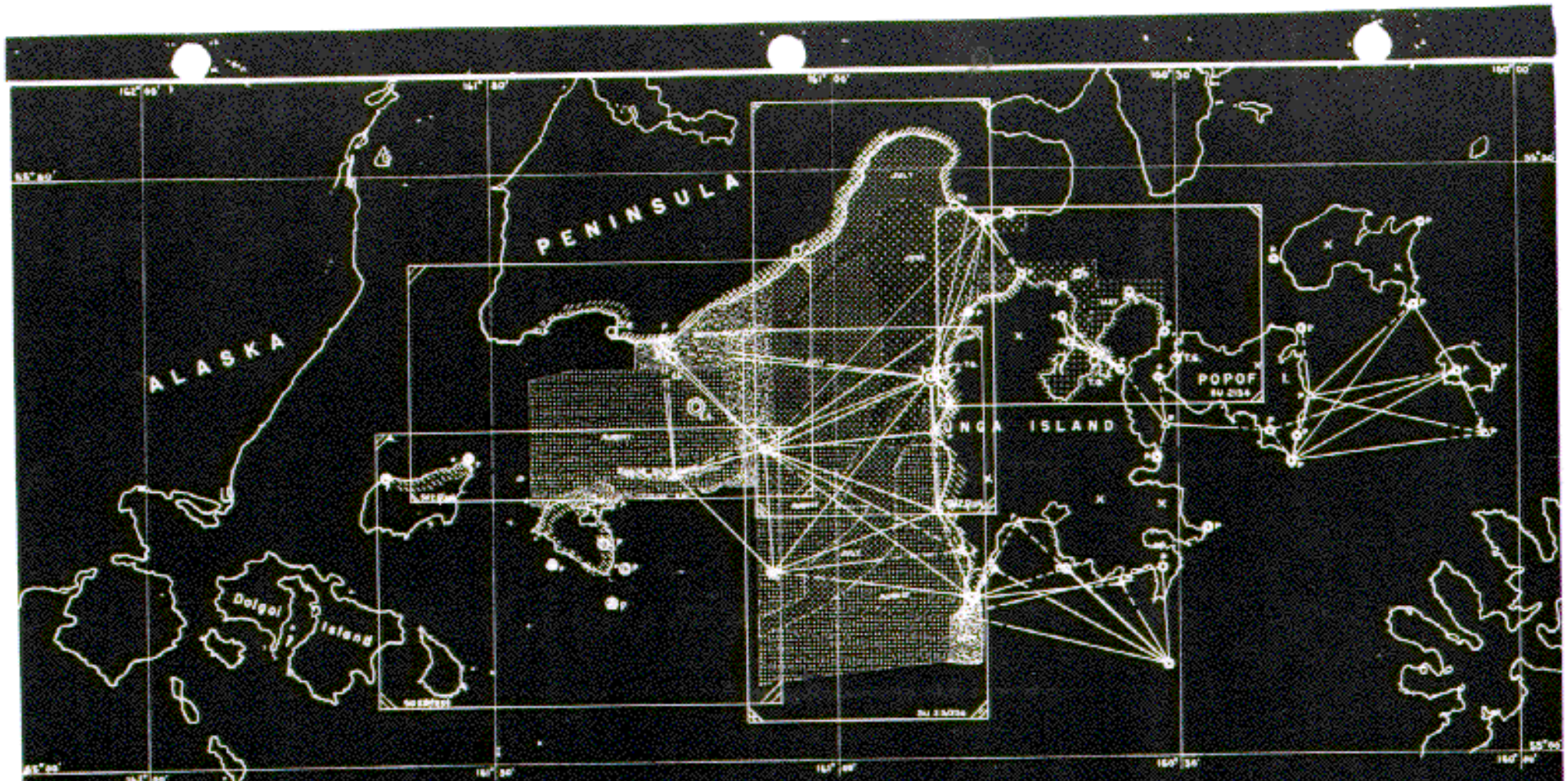
The boat sheet was inspected at the end of each day's hydrography while the work was in progress.

The fathograms and record volumes have been given a final inspection of a general nature and have been approved.

Ninty two per cent of the protracting has been accomplished on the smooth sheet.

Frank G. Johnson

FRANK G. JOHNSON
Commander, USC&GS
Commanding USC&GSS SURVEYOR



LEGEND

HYDROGRAPHY
- Area surveyed — MAY JUNE JULY AUG SEPT
- Signal Building & Photo-Hydro
- Tide Gage — T6
- Current Station — C5

TOPOGRAPHY
- Shoreline Inspection
- Control Station Photo Identification — △P ○P

TRIANGULATION
- Recovered Station
- New Station
- Observed Line
- Observed Line, one direction
- Elevation

- Magnetic Station
- Sharon Station

U. S. COAST & GEODETIC SURVEY
R. F. A. STUDDS, DIRECTOR

PROGRESS SKETCH
COMBINED OPERATIONS
SOUTH SIDE OF ALASKA PENINSULA

PROJECT CS-344

9 MAY – 25 SEPTEMBER 1954

USC&GSS SURVEYOR – F. G. JOHNSON, COMDG.

SCALE OF CHART 8859

E. SMOOTH SHEET

All positions on this sheet were plotted by shipboard personnel. Some replotting was necessary in the Seattle Processing Office in the normal process of smooth sheet analysis.

I. CONTROL OF HYDROGRAPHY

Junctions between simultaneous ~~shore~~ sheran and visual fixes along the west shore of Unga Id. are satisfactory.

J. ADEQUACY OF SURVEY

Inspection of the completed smooth sheet substantiates previous statement under J of report.

K. CROSSLINES

The adequate number of crosslines are all in close agreement, with one exception. An arbitrary plus 2.0 fm correction was applied to crossline 144-154M (ship hydro.) to improve crossings. The fathogram indicates phasing trouble when the machine was returned to the B scale. Ref. page 9 to 12, Vol. 8.

N. DANGERS AND SHOALS

Positions and depths of shoals scaled from the boat sheets, as listed in attached letter to the Director dated 4 Sept. 1954, have been checked and/or corrected in ink against smooth sheet data.

The 11.0 fm shoal listed therein at Lat. 55° 10.67' N, Long. 160° 55.48' W could not be identified on either boat sheet or smooth sheet. Apparently a 17 fm sounding was mistaken for an 11, on the boat sheet. (15 fms. on smooth sheet)

An 8.4 fm shoal, at Lat. 55° 15.72' N, Long. 160° 52.35' W, has been added to that list.

The subject letter includes shoals on adjacent surveys but only those corrected or checked in ink apply to H-8158.

Breakers southeast of JUDE ID. were not plotted and are presumed to be inshore of the reported location. Ref. pos. 38p, Launch #3.
(Breakers not critical to survey; questionable position rejected)

The following three locations of kelp in 30 fms or deeper was presumed floating and omitted from the smooth sheet:

1.	Lat. 55° 11.5' Long. 160° 52.5'	Launch #4 (b day)
2.	Lat. 55° 10.1' Long. 161° 05.3'	Launch #4 (pos. 97g)
3.	Lat. 55° 08.' Long. 160° 51.'	several notes - sndg vols.

Respectfully submitted,

L. W. Eason II

L. W. EASON, II
Cartographer, C&GS

EXAMINED & APPROVED:

William M. Martin

W. M. MARTIN
Supr. Cartographer, C&GS

APPROVED & FORWARDED:

Curtis LeFever

CURTIS LE FEVER, Capt., C&GS
Seattle District Officer

GEOGRAPHIC NAMES PENCILED ON H-8158

ACHEREDIN POINT

BAY POINT

JUDE I.

KENNOYS ISLANDS

PINNACLE POINT

UNGA ISLAND

GEOGRAPHIC NAMES

Survey No. 8158

	Name on Survey	On Chart No. A	On previous survey No. B	On U. S. quadrangle Maps C	From local information D	On local Maps E	P. O. Guide or Map F	Rand McNally Atlas G	U. S. Light List H		
										K	
1	Alaska			(for title)							
2	Shumagin Islands			"	"					BGN	
3	Unga Island ✓										
4	Acheredin Point ✓										
5	Pinnacle Point ✓										
6	Bay Point ✓			(tide station)							
7	Jude Island ✓										
8	Kennoys Islands ✓										
9					Names approved 6-5-57 L. Heck.						
10	Tide stations off sheet:										
11	Sand Point			(village)							
12	Beaver Bay										
13											
14											
15											
16											
17											
18											
19											
20											
21											
22											
23											
24											
25											
26											
27											

M 234

RH C

Form 712
(11-30-55)

U. S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

TIDE NOTE FOR HYDROGRAPHIC SHEET

Chart Division: R. H. Carstens 20 June 1957

Plane of reference approved in
25 volumes of sounding records for

HYDROGRAPHIC SHEET 8158

Locality Shumagin Islands, Alaska

Chief of Party: F. G. Johnson in 1954

Plane of reference is mean lower low water, reading

5.4 ft. on tide staff at Bay Point

8.7 ft. below B.M. 2 (1954)

3.9 ft. on tide staff at Sand Point
10.0 ft. below B.M. 6 (1950)

3.6 ft. on tide staff at Beaver Bay
10.8 ft. below B.M. 1 (1954)

~~Condition of records satisfactory except as noted below~~

Height of mean high water above plane of reference is:

Bay Point	6.6 feet
Sand Point	6.6 feet
Beaver Bay	6.6 feet

William Shofnas
Signature

Chief, Tides Branch

Comm-DC 34330

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. 8158

Records accompanying survey:

Boat sheets 4; sounding vols. 25; wire drag vols. .....;

bomb vols. .....; graphic recorder rolls 12-Envelopes

special reports, etc. 1-Smooth sheet and 1-Descriptive report.

.....

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

Number of positions on sheet		5837
Number of positions checked		46
Number of positions revised		8
Number of soundings revised (refers to depth only)		40
Number of soundings erroneously spaced		—
Number of signals erroneously plotted or transferred		—
Topographic details	Time	6
Junctions *	Time	12
Verification of soundings from graphic record	Time	10

Verification by Alex Hoffman * Ernest Thomas Total time 48 307 Date 4/2/58

Reviewed by J. A. Dinsmore Time 40 Date 1/31/58

* Verified 1-98 T (blue)
14-28h " AJH

Examined H-6774 (1942)
H-8159 (1954) } Unverified 10/24/57
H-8157 (1954) }
H-8116 (1914) AJH

M-2232-1

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-8158 FIELD NO. SU-25-254

Alaska, Shumagin Islands, West of Unga Island

Surveyed: July - Sept. 1954 Scale 1:25,000

Project No. CS-344

Soundings:	Control:
808 Depth Recorder	Shoran
Edo Echo Sounder	Sextant fixes on shore
Hand Lead	signals

Chief of Party - F. G. Johnson
Surveyed by - F. R. Gossett, V. R. Sabieralski, M. J. Tonkel
Protracted by - P. A. Stark & E. R. Stone & S. L. Hollis
Soundings plotted by - L. W. Eason
Verified and inked by - A. Hoffman & E. Thomas
Reviewed by - T. A. Dinsmore Date: 31 Jan. 1958
Inspected by - R. H. Carstens

1. Shoreline and Control

The shoreline originates with the unreviewed manuscripts of air-photographic surveys T-11109, T-11110, T-11118 and T-11119 of 1952-54.

The origin of the control is given in the Descriptive Report.

2. Sounding Line Crossings

Depths at crossings are in very good agreement considering the irregularities in the bottom.

3. Depth Curves and Bottom Configuration

The usual depth curves are adequately delineated except in some inshore localities where the foul character of the bottom prevented the running of sounding lines.

The outstanding characteristic of this area is the irregularity of the bottom. Shoals and deeps are often found close together much as if one had been formed from material gouged out of the other.

An unusual feature occurs in lat. 55°14.2', long. 160°54.6', where a crater rises to within 13 fms. of the surface from surrounding depths of 20 fms. The crater rim encloses a 3-fm. depression.

4. Adjoining Surveys

Adequate junctions were effected with H-3716 (1914) on the southeast, H-6774 (1942) on the south and with H-8159 (1954) on the northwest. A few overlapping soundings from H-3716 were not carried forward to the present survey because of disagreement with depths on the present survey. They are considered to be erroneous either in depth or position and have been so indicated on the prior survey smooth sheet.

The junctions between the present survey and H-8089 (1955) on the west and H-8157 (1954) on the north will be considered in the reviews of those surveys.

5. Comparison with Prior Surveys

There are no prior surveys of the area by this Bureau. However, one line of soundings from reconnaissance survey H-3654 of 1913-14 (scale 1:100,000) crosses the southern margin of the present survey. Considering the irregularities in the bottom, no important differences are noted in the prior and present depths.

The 31-fm. sounding charted in lat. 55°05.90', long. 160° 47.85', should be disregarded. Originating with junctional survey H-3716 (1914), this prior sounding which falls within the overlap area of the two surveys, falls in present depths of 41 fms. The prior sounding was probably recorded 10 fms. in error.

The present survey supersedes the few prior soundings which fall within the area of the present survey.

6. Comparison with Chart 8704 (Latest print date 5/2/56)

A. Hydrography

Charted hydrography originates almost entirely with advance information of the present survey shown on blueprints 51948-51 (boat-sheet copies).

The 15-fm. sounding charted in lat. 55°05.9', long. 161° 06.3', from the boat sheet of the present survey should be disregarded. An illegibly recorded 25 was mistaken for 15.

The two inshore islets charted in lat. 55°12.7', long. 160°51.1', originate with a preliminary manuscript of T-11119 from which they were transferred to the boat sheet of the present survey and subsequently charted. An advance print of T-11119 which is based on field-inspected air photos does not show any islets but does describe the locality as foul. The islets should be disregarded.

Although no other discrepancies of importance are noted, the following soundings which in some instances reveal uncharted bottom features from the present survey are listed for the consideration of the Chart Compilation Section:

Latitude	Longitude	Survey Depth (fms)
55°12.1'	160°59.75'	31
08.2'	161°00.85'	52
07.7'	160°53.3'	36
05.8'	160°57.1'	51
05.7'	161°01.0'	40
05.05'	161°00.85'	40
04.8'	161°03.15'	28
04.9'	160°53.35'	35

Numerous charted soundings differ from 1 to 4 fms. with the verified smooth-sheet soundings. The present survey entirely supersedes the charted information.

B. Aids to Nagivation

No aids to navigation are charted in this area.

7. Condition of Survey

a. The sounding records are complete; the Descriptive Report covers all matters of importance.

b. The smooth plotting was accurately done.

8. Compliance with Project Instructions

The survey adequately complies with the Project Instructions.

9. Additional Field Work

This is an excellent basic survey and no additional field work is required.

Examined and approved:

Max G. Ricketts
Chief, Nautical Chart Branch

Karl B. Jeffers 2/20/58
Karl B. Jeffers
Chief, Hydrography Branch

Charles A. Schanck
Chief, Division of Charts

Samuel B. Grenell
Chief, Division of Coastal Surveys

161° 00'

55° 10'

Pinnacle Pt.

Jude I
(approx 150 ft)

Kennoys Is

Sombrero Pt.

UNGA

UNGA ISLAND

Acheredin Bay

Acheredin Pt

8158

MAGNETIC

VAR 18° 00' E (1995)

ANNUAL DECREASE

Chart - 8700

NAUTICAL CHARTS BRANCH

SURVEY NO. H-8158

Record of Application to Charts Review 1-31-58

DATE	CHART	CARTOGRAPHER	REMARKS
26 Dec 57	9000	K.E. MacEwen	[redacted] before After Verification and Review.
22 Oct 58	8704	Nichols	~~Before~~ After Verification and Review
			Complete Application
16 June 60	8859	Nichols	~~Before~~ After Verification and Review
			Through Chart 8704
30 Dec 60	880v	Do	~~Before~~ After Verification and Review
			Thru 8859
3 Jan 61	930v	Do	~~Before~~ After Verification and Review
			Thru 880v
3-22-61	9000	F.M. Albert	~~Before~~ After Verification and Review via 930v
14 Feb 63	8700	Fred Brovold	~~Before~~ After Verification and Review Partly applied
4-16-63	"	R.E. Elkins	Revised only notated edge line within 10 Pmc to agree with 8704 dy revised Oct 58.
1/5/78	16553		~~Before~~ After Verification and Review
			Thru 8704
			Before After Verification and Review
			Before After Verification and Review

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A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.