

6850

Form 504

U. S. COAST AND GEODETIC SURVEY
DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Hydrographic
Field No. 6143 Office No. H-6850

LOCALITY
State Alaska
General locality Atka Island
Locality Cape Korovin to Kasatochj Island
~~North coast Atka Island~~

1943

CHIEF OF PARTY

Casper M. Durgin
SURVEYOR

LIBRARY & ARCHIVES

DATE DEC 9 1944

6850

HPC

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

REG. NO. H6850

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. 6145

REGISTER NO. H-6850

State Alaska Aleutian Islands

General locality Atka Island
~~Aleutian Islands~~

Locality Cape Korovin to Kasatochi Island.
~~North Coast of Atka Island~~

Scale 1:60,000 Date of survey May 14 - Aug. 13, 1945

Vessel Ship SURVEYOR

Chief of Party Casper, M. Durgin

Surveyed by C.M. Durgin, W.F. Malmate, L.C. Wilder, L.S. Hubbard

Protracted by Marion T. Gwinn

Soundings penciled by Marion T. Gwinn

Soundings in fathoms XXX ~~Fathoms and Cenths~~

Plane of reference MLLW

Subdivision of wire dragged areas by _____

Inked by J. A. McCormick

Verified by "

Instructions dated April 16, 1945

Remarks: Smooth Sheet and Plotting by the
Seattle Processing Office.

ref

NOTES FOR DESCRIPTIVE REPORT

To Accompany

HYDROGRAPHIC SURVEY

H-6850 (Field No. 6143)

INSTRUCTIONS

This survey was executed under authority of the Director's Instructions, dated April 16, 1943.

LIMITS

The survey comprises the hydrography on the north shore of Atka Island from the mouth of Korovin Bay to Cape Kigun, approximately outside of the fifty-fathom curve and extending to the thousand-fathom curve. The survey joins previous surveys by the U.S. Navy on the west and contemporary¹⁹⁴³ surveys as follows:

H-6845 on the east *
H-6846 on the southeast
H-6847 on the south
H-6848 on the southwest*
H-6849 in the area bounding Koniuji Island *

* In office
at time
of review.

SURVEY METHODS

Standard methods were used throughout this survey, positions being controlled by sextant fixes on located objects ashore. These objects were located by triangulation and topography, and supplemented by hydrographic signals located from the ship by sextant cuts on landmarks ashore. To expedite the hydrography, many objects were located by sextant cuts early in the season and, later, better located as topography was accomplished.

DISCREPANCIES

Since the boat sheet was accomplished on the Atka, 19~~23~~³⁴ datum, it does not properly join work by the U.S. Navy on their datum by the amount of the difference in datum. This discrepancy will be eliminated when a common datum is used. ✓

Smooth sheet
on Unalaska
Datum.

It is expected that small discrepancies, shown by intersections of sextant cuts locating hydrographic signals, will be minimized upon the smooth plotting of the sheet. ✓

The area was previously unsurveyed, so no discrepancies exist with old surveys. ✓

DANGERS

Koniuji Island, which is about $\frac{1}{2}$ mile in diameter and ~~113~~⁸⁸⁰ feet high, is considered the only danger due to the offshore nature of this sheet. ✓

ANCHORAGES

There are no anchorages within the limits of this survey. ✓

GEOGRAPHIC NAMES

No new geographic names are submitted for features within the limits of this survey. ✓

STATISTICS

Statute miles of sounding - 1135.4 ✓
Number of positions - 1580.0

Respectfully submitted,

Clarence A. George

CLARENCE A. GEORGE, H. & G.E.
U.S.C. & G. Survey

Approved and forwarded:

L.C. Wilder

L.C. WILDER, Commanding
Ship SURVEYOR

H-6850

North Coast of Atka Island

Seattle Processing Office Notes

Control:

The 1943 triangulation by Scaife, Meaney, and Roberts is the basic control. It is on the Unalaska Datum - unadjusted. This work was originally on the Atka datum, but the triangulation was re-computed on Unalaska datum by the Washington Office, these recomputations including also the U.S.N. triangulation to westward of Atka. ✓

Signals:

Topographic signals are from sheets T-6917, T-6918, T-6919, T-6920, T-6921, and T-6922 of 1943. ✓

The soundéd area is simple, uncomplicated, and clear, and requires no further comment. ✓

TIDAL NOTE

To Accompany

HYDROGRAPHIC SURVEY

H-6850

Field No. 6143

The portable automatic tide gage at Bechevin Bay was used for the reduction of all soundings.

The plane of mean lower low water corresponds to a reading of 4.1 feet on Staff No. 1, (June 5 to June 25); 3.9 feet on Staff No. 2, (June 29 to August 14); and 3.9 feet on Staff No. 3, (August 22, 1943).

(See special report on tidal data, Project CS-218-1943)

Highest Tide 8.9 feet on July 15, 1943.

Lowest Tide 2.5 feet on August 14, 1943.

Latitude 52° 01.98

Unalaska Datum

Longitude 175 07.12

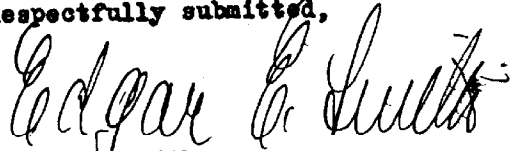
Authority: Director's letter dated July 12, 1943.

H-6850STATISTICS

Date	Day	Ship	Vol. No.	No. of Positions	H.L. & Wire Soundings	Stat. Mi. Sdg. Line
1943						
5/14	A	SURVEYOR	1	117	4	86.9
5/18	B	"	1	15	0	11.5
5/19	C	"	1 & 2	145	3	102.4
5/20	D	"	2	84	2	60.2
5/21	E	"	2	90	4	53.7
5/24	F	"	2	18	1	11.8
5/27	G	"	2 & 3	63	2	36.7
6/3	H	"	3	15	2	8.2
6/4	J	"	3	52	2	34.0
6/5	K	"	3	39	2	28.8
6/17	L	"	3	73	1	46.7
6/18	M	"	3 & 4	94	1	64.6
6/27	N	"	4	142	1	93.9
6/28	P	"	4	25	0	17.2
6/30	Q	"	4	57	0	57.0
7/4	R	"	4 & 5	38	1	23.0
7/21	S	"	5	23	1	15.0
7/25	T	"	5	96	2	78.8
7/26	U	"	5	94	2	73.7
7/27	V	"	5 & 6	92	2	69.2
7/28	W	"	6	70	2	46.7
8/4	X	"	6	105	2	92.4
8/13	Y	"	6	33	1	23.0
			6 Vols.	1580	38	1135.4

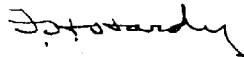
Area 505.0 Sq. Stat. Mi.

Respectfully submitted,



Edgar E. Smith
Cartographic Engineer
Seattle Processing Office

Approved and Forwarded:



F. H. Hardy
Officer in Charge,
Seattle Processing Office.

Surveys Section (Chart Division)

HYDROGRAPHIC SURVEY NO. H6850

Records accompanying survey:

Boat sheets ..1.; sounding vols. 6.; wire drag vols.;
bomb vols.; graphic recorder rolls .2...;
special reports, etc.
.....

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

Number of positions on sheet	..1580.
Number of positions checked	...39.
Number of positions revised	...29
Number of soundings recorded	..1000 (approx).
Number of soundings revised (refers to depth only)	...13
Number of soundings erroneously spaced	..many
Number of signals erroneously plotted or transferred	...0.
Topographic details	Time
Junctions	Time
Verification of soundings from graphic record	Time

Verification by ..J.A. McCormick. Total time .130 hrs. Date 2/10/45..

Review byJ.A. McCormick..... Time ..4 hrs. Date 2/19/45..

Remarks.

Decisions

	Remarks.	Decisions
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GEOGRAPHIC NAMES

Survey No.
H6850

Name on Survey

A	B	C	D	E	F	G	H	K
	On Chart No.	On previous survey No.	On U. S. quadrangle Maps	From local information	On local Maps	P. O. Guide or Map	Rand McNally Atlas	U. S. Light List

<u>Aleutian Islands</u>									1
<u>Atka I.</u>			520 740				U.S.G.B.		2
<u>Cape Korovin</u>			"						3
<u>Kasatochi I</u>			520 755				4		4
<u>Koniuji I</u>			520 750				11		5
<u>Korovin Bay</u>			520 740				"		6
									7
			by L. Heck 502/28/45						8
									9
<u>Bechevin Bay</u>			location of tide staffs						10
									11
									12
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									27

TIDE NOTE FOR HYDROGRAPHIC SHEET

January 11, 1945.

~~Division of Hydrography and Topography:~~

✓ Division of Charts: Attention: H. R. EDMONSTON

Plane of reference approved in
6 volumes of sounding records for

HYDROGRAPHIC SHEET 6850

Locality North Coast of Atka Island, Aleutian Islands, Alaska.

Chief of Party: C. M. Durgin in 1943

Plane of reference is mean lower low water reading

4.1 ft. on tide staff ~~at~~ No. 1 at Bechevin Bay

5.3 ft. below B. M. 1

3.9 ft. on tide staff No. 2 and 3 at Bechevin Bay

5.3 ft. below B. M. 1

Height of mean high water above plane of reference is 3.5 feet.

Condition of records satisfactory except as noted below:

H. A. Marmor
Chief, Division of Tides and Currents.

DIVISION OF CHARTS

Hydrographic Section — Nautical Chart Branch

REVIEW OF HYDROGRAPHIC SURVEY REGISTRY NO. 6850

Field No. 6143

Aleutian Islands; Atka Island;
Cape Korovin to Kasatochi Island
Surveyed in May-August 1943, Scale 1:60,000
Project CS-218

Soundings:

808 Fathometer
Dorsey Fathometer
312 Fathometer

Control:

Three-point fix on shore signals

Chief of Party - C. M. Durgin
Surveyed by - C. M. Durgin
Protracted by - M. T. Gwinn
Soundings plotted by - M. T. Gwinn
Verified and inked by - J. A. McCormick
Reviewed by - J. A. McCormick

Inspected by - H. W. Murray, February 19, 1945

1. Sounding Line Crossings

In depths to 100 fathoms, the crossings are excellent. Deeper than 100 fathoms, some disagreement is found on steep slopes but on the whole the agreement is very satisfactory for such bottom.

2. Depth Curves

Detailed curves drawn by Mr. H. W. Murray bring out the submarine features of the area very clearly. Intermediate curves have been used where necessary to accentuate small rises and deeps.

3. Adjoining Surveys

Excellent junctions were effected with H-6845 (1943) on the east, H-6848 (1943) on the southwest, and with H-6849 (1943) in the vicinity of Koniuji Island. Other 1943 inshore surveys (see descriptive report) had not been received in the office at this writing.

On the west, the present survey overlaps H-6898, a Navy survey made in 1934. Agreement of overlapping depths is better than is usually the case where offshore Navy surveys are involved.

4. Previous Surveys

None available.

5. Comparison with Chart 8862 (Print of Jan. 27, 1944)
Chart 9136 (Print of Nov. 25, 1943)
Chart 9137 (Print of Dec. 2, 1943)

Hydrography charted in the area is from blueprint 37488, advance compilation of present and adjoining surveys. Depths on the print are from boatsheets and consequently uncorrected and subject to adjustment in position. There are no major differences between charts and survey but the charts should be revised to eliminate such differences as do exist.

6. Compliance with Project Instructions

Satisfactory.

7. Additional Field Work Recommended

None.

Examined and approved:

Charles Price
Division of Charts

J. E. Borden
Chief, Division of Charts

Earl O. Heston
Chief, Section of Hydrography

Raymond P. Egan
Chief, Division of Coastal Surveys

NAUTICAL CHARTS BRANCH

SURVEY NO. H6850

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
4/16/45	9136	F.M.A.	Before After Verification and Review <i>partial appl.</i>
7/1/45	9137	F.A. Mc Gann	
7/1/45	9138	F.A. Mc Gann	Before After Verification and Review
7/12/45	9137	F.A. Mc Gann	Before After Verification and Review
Oct 1947	9102	H.F. Deyman	Before After Verification and Review thru chart 8862
Oct 1947	8862	H.F. Deyman	Before After Verification and Review <i>the part thru chart</i> <i>9137 and 9136</i>
11-13-69	9136	Howard Roberts	Before After Verification and Review <i>fully appl.</i>
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
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			Before After Verification and Review

M-2168-1

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.

Partial application to chart 9136 J.M.A. 4-16-45.