7169

Diag'd. on Diag. Ch. No. 8859

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey RECONNAISSANCE HYDROGRAPHY

Field No. 81-46-ELJ *Office No.* H-7169

LOCALITY

State ALASKA

General locality ~~SOUTH COAST~~ ALASKA PENINSULA

Locality IVANOF ~~BAY~~ AND STEPOVAK BAYS

194 6

CHIEF OF PARTY

L. S. HUBBARD

LIBRARY & ARCHIVES

DATE

B-1870-1 (1)

7169

MAR 31 1947

Form 537
(Ed. Nov. 1941)

REG. NO. H7169

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.

Reconnaissance

REGISTER No. H-7169

Field No. 81-46-LJ

State Alaska ✓

General locality Alaska Peninsula ✓

Locality Ivanof and Stepovak Bays ✓

Scale 1:80,000 Date of survey May 6 to September 6, 1946

Instructions dated 22 March 1945

Vessel LESTER JONES

Chief of party L. S. Hubbard

Surveyed by L. S. Hubbard

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

Protracted by L. S. Hubbard

Soundings penciled by B. B. Jones

Soundings in fathoms ~~feet~~ at ~~MLW~~ MLLW

REMARKS: Reconnaissance hydrography executed incidental to air-photo inspection. ✓

U. S. GOVERNMENT PRINTING OFFICE 428975

DESCRIPTIVE REPORT

TO ACCOMPANY

RECONNAISSANCE HYDROGRAPHIC SURVEY

FIELD NUMBER 81-46ELJ

1946

U.S.C.& G.S.S. LESTER JONES

L. S. HUBBARD COMDG.

PROJECT

Reconnaissance hydrography was executed in conjunction with and incidental to Project 28-aro-1995 ELJ-1 dated 22 March 1945-field inspection of air photographs.

SURVEY LIMITS AND DATES

Sounding lines were run in Ivanof Bay, the east side of Kupreanof Peninsula, the east side of Stepovak Bay and the west side of Stepovak Bay between Ramsey Bay and American Bay. The first day of sounding in this area was 6 May, the last day 6 September 1946.

VESSEL AND EQUIPMENT

All hydrography on this sheet was done by the E. LESTER JONES sounding with a fathometer. ~~with the exception of one half day's work, which was done with a skiff sounding with a hand lead.~~ *A-7170

The first part of the season a Navy type NK-7 fathometer, serial # 231 with sounding recorder # 350 was used. In June an 808A fathometer, Submarine Signal Company # A808J6 was received from the Washington Office. This 808A fathometer was used for the rest of the season.

TIDES

All soundings were corrected from the predicted tides at Kodiak. A time factor of plus 40 minutes and a range factor of 0.8 was applied to the Kodiak tides.

CONTROL STATIONS

The triangulation established by J. B. Miller in 1914 was used as a basis for control. This control was developed into a network of supplemental triangulation during 1946. All triangulation was computed on the North American 1927 datum.

The positions of all control stations, with few exceptions, used in the hydrography were based on triangulation computations. The exceptions are the following stations: FOAM- located by precise hydrographic cuts, *(OX, COW, GRAN, BIT, and PIN-to be located by radial plot from the air-photographs.) *See "Review."

SHORELINE

The shoreline ~~shown on the boat sheet~~ was reduced and transferred from the topographic sheets T8465, T8464, T8469, T8468, T8462, and T8463.

These topographic sheets were compiled from a preliminary radial plot in the Office. As the detailed triangulation control progressed during the season, it became evident that the shoreline on the boat sheet was out of position. This shoreline should therefore not be transferred to other sheets.

SOUNDINGS

Fathometers were used for all soundings taken by the E. LESTER JONES. The scale of the NK-7 fathometer is inadequate for accurate hydrography. Much difficulty was encountered in operating the 808A fathometer, ~~its range being very limited.~~

No salinity or temperature corrections are applied to the soundings. Most of the soundings were in depths of from 20 to 40 fathoms. A few times depths of 50 to 60 fathoms were recorded.

CONTROL OF HYDROGRAPHY

Standard sextant three point fixes taken at regular intervals on shore signals were used to control all the hydrography on this sheet. See "Review"

ADEQUACY OF SURVEY

All hydrography was of a reconnaissance nature. It was executed in order to permit larger survey vessels to navigate in the area until standard hydrographic surveys can be completed.

COMPARISON WITH CHART

Soundings shown on chart 8859 are few and scattered. No marked discrepancies were noted.

DANGERS AND SHOALS

The following shoals and reefs were previously charted but were not accurate in location.

OBJECT	DEPTH OR HEIGHT	LATITUDE	LONGITUDE	
Shoal off wharf, North Ivanof Bay	1.7 fathoms	55°53.95'	159°29.36'	
Reef, east of John Id.	bares 4' MLLW	55°51.15'	159°29.25'	H-7170 (1946)
Reef, east of John Id.	bares 2' MLLW	55°51.64'	159°28.28'	
Shoal area in Fox Bay	bares 3' MLLW	55°38.5' ✓ 55°38.8'	159°40.7' ✓ 159°41.7'	T-5693
Reef between, Clark Bay and Grub Gulch	Elev. 1 ft.	55°46.2'	159°57.9'	correctly charted as to position

The following shoals have not been previously charted:

OBJECT	DEPTH OR HEIGHT	LATITUDE	LONGITUDE
Shoal off Kupreanof Pt.	~~breaker~~ Rk. awash MLLW T-5693	55°34.3'	159°35.4'
Shoal north of Pad Id.	5,5 fathoms ✓	55°45.5'	159°41.4'

COAST PILOT INFORMATION

Coast Pilot notes have been submitted for this region in a separate report.

LAND MARKS FOR CHARTS (OBJECTS TO BE EMPHASIZED)

The objects to be emphasized are submitted on form 567, a copy of which is attached to ~~this report.~~ H-7170(1946) ← See chart letter 240 (1947)

GEOGRAPHIC NAMES

With few exceptions the geographic names used on the charts are the names in common local usage. The exceptions, however, seldom are called by the charted names but by local names. The names in local usage are Road Island for John Island, John Point for Kupreanof Point, Chicago Bay for Chichagof Bay.

A few additional new names are recommended by this party. All names are discussed below.

ROAD ISLAND

JOHN ISLAND in Ivanof Bay is locally called Road Island. A Mr. Road owns and has lived in this island for many years. Since there is a second H-7170

John Island in the Shumagin Islands it is desirable that the name of one of the John Islands be changed. It is recommended that after the death of Mr. Road the name of the John Island in Ivanof Bay be changed officially to Road Island. This would be in accordance with local usage.

SMOKY HOLLOW

The cove in the northwest part of Ivanof Bay west of the sand spits is locally called Smoky Hollow. The name is due to the sudden and fierce williwaws which strike the cove. H-7170

KUPREANOF POINT

Kupreanof Point is locally called John Point. Since the name John is too frequently used as a place name, it is recommended that the charted name be retained.

STONEHOUSE COVE

The small cove located just inside the north side of the entrance to Island Bay in Stepovak Bay, is locally called Stonehouse Cove. This name is due to the presence in the cove of some striking rock formations.

PAD ISLAND

The survey party recommends that the low flat island located northwest of Island Bay be named Pad Island. The name is recommended because of the flat appearance of the island. A scarcity of place names in this part of Stepovak Bay makes descriptions and identification of other objects extremely difficult. Since no other name is known for this island, it is recommended that the name Pad Island be accepted.

GRANVILLE COVE

The small cove located in the northeast corner of Stepovak Bay is unnamed so far as could be found. Since Granville Portage is adjacent to this cove, it is recommended that the cove be named Granville also.

DATA

341 miles of hydrography was executed,

Respectfully submitted,

L. S. Hubbard

L. S. Hubbard, Comdg.
E. LESTER JONES

LJ 8146

Ivanof and Stepovak Bays

Geographic Names

Pacific Ocean

Alaska Peninsula

Korovin Island omit

Karpa Island

Stepovak Bay

Ivanof Bay

Kupreanof Pt.

Fox Bay

Pad Island

Clark Bay

Grub Gulch

Island Bay

Stonehouse Cove omit

Granville Cove omit

Chichagof Bay

Orzinski Bay

Respectfully submitted,

Edgar E. Smith

Edgar E. Smith
Cartographic Engineer
Seattle Processing Office

ELJ 8146 and ELJ 2146

Ivanof and Stepovak Bays, Alaska Peninsula

Seattle Processing Office Notes

These projections were prepared and plotted by the field party after returning to Seattle. They were turned in to the Processing Office as "boat sheets." Nearly all the signals are computed points. The soundings were corrected for tide only. No fathometer corrections were applied as the work is reconnaissance, the depths are relatively shoal, and the fathometers were not satisfactory.

As the sheets were newly made and in good condition, it seemed unnecessary to make other ones. The sheets and plotted positions were used as prepared by the field party. The soundings were replotted to MLLW values in the Processing Office.

The 1:80,000 sheet, H-7169, shows all the soundings for Ivanof Bay and Stepovak Bay. The 1:20,000 sheet, H-7170, shows Ivanof Bay only. On the 1:80,000 sheet the soundings which duplicate those on the 1:20,000 sheet were not replotted but remain as shown by the field party. The difference in lettering makes this clearly discernable. ~~On the 1:80,000 sheet one line in Ivanof Bay, positions 17A to 30A day, is not duplicated on the 1:20,000 sheet.~~

The objects recommended for charting have not been plotted. Some of them seem to be named triangulation stations and it was deemed best to let this be done by someone having available the triangulation descriptions and the inspected photographs. Note that photograph numbers appear on the sheet in pencil. (Chart Letter 240 (1947) is adequate, in lieu of basic surveys)

GEOGRAPHIC NAMES

Survey No. H7169

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	
Alaska Peninsula									USGB	1
Stepovak Bay									USGB	2
Ivanof Bay			(location of tide staff)							3
Fox Bay										4
American Bay										5
~~Orzinski~~ Orzinski Bay										6
Clark Bay										7
Grub Gulch										8
Island Bay										9
Kupreanof Pt.									USGB	10
Pad Island										11
Karpa Island									USGB	12
										13
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										27

Names underlined ... and approved by L. Heck on 7/11/47

M 234

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. H7169

Records accompanying survey:

Boat sheets .none; sounding vols. .4...; 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		401
Number of positions checked		116
Number of positions revised		67
Number of soundings revised (refers to depth only)		90
Number of soundings erroneously spaced		—
Number of signals erroneously plotted or transferred		41
Topographic details	Time	—
Junctions	Time	—
Verification of soundings from graphic record	Time	10
Checking control		40

Verification by ..Roy E. Elkins.. Total time ..83.. Date 6-12-47

Reviewed by ..G. T. Jordan.. Time ..6.. Date 7-9-47

M-2232-1

L.C.W.
Form 712
DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
Rev. June 1937

TIDE NOTE FOR HYDROGRAPHIC SHEET

~~Division of Hydrography and Topography~~ April 11, 1947

Division of Charts: H. W. MURRAY

Plane of reference approved in
4 volumes of sounding records for

HYDROGRAPHIC SHEET (7169, 7170)

Locality - Ivanof Bay, Alaska Peninsula, Alaska

Chief of Party: L. S. Hubbard in 1946
Plane of reference is mean lower low water.
ft. on tide staff at
ft. below B. M.

Tide reducers were obtained by using Kodiak predictions with time allowance of + 20 minutes, and a ratio of range of .8

Height of mean high water above plane of reference is 6.1 feet.

Condition of records satisfactory except as noted below:

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

U. S. GOVERNMENT PRINTING OFFICE 154327

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY REGISTRY NO. H-7169

FIELD NO. 81-46-LJ

Reconnaissance

Alaska, Alaska Peninsula, Ivanof and Stepovak Bays
Surveyed in May to September 1946 Scale 1:80,000
Project No. -----

Soundings:

NK-7 Fathometer
808A Fathometer

Control:

Sextant fixes on shore signals and natural objects

Chief of Party - L. S. Hubbard
Surveyed by - L. S. Hubbard
Protracted by - L. S. Hubbard
Soundings plotted by - B. B. Jones
Verified and inked by - R. E. Elkins
Reviewed by - G. F. Jordan, July 9, 1947
Inspected by - H. W. Murray

The hydrography on this small-scale survey is sparse and was obtained incidental to the field inspection of air photographs. Fathometer corrections are not applied to the soundings, and the soundings are reduced for assumed tides which were derived from corrections to the predicted tides at Kodiak. Some soundings were rejected because of faint, unclear fathogram recordings and because of uncertain sextant fixes.

The control for the survey originates with prior and contemporary triangulation. Additional control was not utilized in smooth plotting because the radial plot of the selected signal features is not yet available. However, the number of sextant fixes on triangulation stations is adequate to control the plotted reconnaissance sounding lines.

The shoreline is from compilations of preliminary radial plots of air photographic surveys T-8462, T-8463, T-8464, T-8465, T-8468 and T-8469, and is subject to revision.

The soundings on prior reconnaissance survey H-3722 (1914) scale 1:100,000, and the corresponding sparse soundings on Chart 8859 (print date of July 7, 1945) do not conflict with soundings on the present survey.

Hydrography on the present survey supplements the hydrography presently charted and is subject to further consideration when subsequent basic surveys of the present project are received.

Examined and approved:

I. E. Rittenburg
Chief, Nautical Chart Branch

C. M. Durgin
Chief, Division of Charts

K. G. Crosby
Chief, Section of Hydrography

C. K. Green
Chief, Division of Coastal Surveys

NAUTICAL CHARTS BRANCH

SURVEY NO. H7169

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
4/29/47	8802	Risegari	Before ~~After~~ Verification and Review (Partially applied)
"	8859	"	" " " " "
18 May 49	8859	Nichols	~~Before~~ After Verification and Review
19 May 49	8700	"	" " " "
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			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.