7191

Diag. Cht. No. 8252-2

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey HYDROGRAPHIC

Field No. PA-1347 *Office No.* H-7191

LOCALITY

State SOUTHEAST ALASKA

General locality SITKA SOUND---BARANOF ISLAND

Locality POVOROTNI POINT TO DEEP INLET

1947

CHIEF OF PARTY

G. E. Boothe

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DATE 3 OCTOBER, 1950

B-1870-1 (1)

7191

Form 537
(Ed. Nov. 1941)

REG. NO. H-7191

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-7191

Field No. PA-1347

State S. E. Alaska

General locality Sitka Sound - Baranof Island

Locality Povorotni Point to Deep Inlet

Scale 1:10,000 Date of survey June and July 1947

Instructions dated (Revised) 14 April 1947

Vessel PATTON - Launch No. 92

Chief of party Glendon E. Boothe

Surveyed by Glendon E. Boothe and Karl B. Jeffers

Soundings taken by fathometer, graphic recorder, hand lead, wire Fathometer and Hand Lead

Protracted by William M. Martin
William M. Martin

Soundings penciled by

Soundings in fathoms & tenths ~~feet~~ at ~~MLW~~ MLLW ~~Fathoms at MLW~~
and are true depths

REMARKS:

U. S. GOVERNMENT PRINTING OFFICE 428975

DESCRIPTIVE REPORT TO ACCOMPANY

HYDROGRAPHIC SURVEY H-7191 (PA-1347)

POVOROTNI POINT TO DEEP INLET 1947

SITKA SOUND, S. E. ALASKA

SCALE 1:10,000

U. S. C. & G. S. S. PATTON, GLENDON E. BOOTHE, CMDG.

* * *

A. - PROJECT:-

This work is part of Project CS-247 for which revised instructions were issued under date of 14 April 1947.

B. - SURVEY LIMITS AND DATES:-

The survey covers the inshore area from the south side of Povorotni Point to the entrance to Deep Inlet and the waters surrounding the offlying islands northwest of Povorotni Point. Field work was begun on 6 June 1947 and was completed 18 July 1947.

Junctions were made with the following listed surveys:- H-7096, WE-1445 1945, scale 1:10,000, Southeast of Povorotni Point. H-6948, Scale 1:1000, Southern limit of sheet. (1942-43)
H-6655, Scale 1:20,000, Western limit of sheet. (1940-41)
H-6355 (1938), Scale 1:10,000, Northern limit of sheet.
H-7190, PA-1247 (1947), Scale 1:10,000, at entrance to Deep Inlet.

In addition to the area in which a new basic survey was required there were 10 shoal areas within the limits of the above mentioned surveys which required detailed development and investigation.

The entire area has a very rough bottom and a great deal of time was consumed in close-spaced development hydrography and hand lead investigation of all shoal indications.

C. - VESSEL AND EQUIPMENT:-

All hydrography was done in Launch No. 92 operating from the PATTON and using ship's personnel. Soundings were taken with an 808 type recording fathometer No. 51 and standard hand lead equipment. A few bottom samples in deep water were taken by the PATTON using an electric, wire sounding machine.

D. - TIDE AND CURRENT STATIONS:-

No tide or current observations were obtained within the limits of this survey. Current stations were occupied in Sitka Sound and are the subject of a separate report. The Standard Tide station maintained at Sitka was used for the reduction of soundings. No time or range factor was applied. Tabulations of hourly heights of the tide were furnished by the Washington Office.

E. - SMOOTH SHEET:-

The smooth sheet ~~will~~ was constructed and the hydrography plotted by personnel at the Seattle Processing Office.

F. - CONTROL STATIONS:-

Triangulation stations established by G. C. Jones in 1938 and Charles Pierce in 1942 were supplemented by triangulation at the entrance to Deep Inlet in 1947. All previously established stations were recovered.

Topographic stations were located by graphic control methods on aluminum mounted sheets. The signals used in this survey will be found on sheets T-7045 (PA-D-47) and T-7046 (PA-E-47). The area covered by T-7046 was surveyed in 1942, (see T-6888). A number of the signals established at that time were recovered and the same name was used in this year's work. Sheet T-7046 should be used as the source for location of these signals.

Four signals were located by sextant angles and pertinent data are indexed in Volume No. 1 of the sounding records.

G. - SHORELINE AND TOPOGRAPHY:-

The shoreline and topography ~~will be~~ was compiled from air photographs of the area supplemented by the above listed graphic control sheets. This work ~~will be~~ was done by another office. Review, par. 1.

The low water line could not be obtained in the major portion of this area. The shoreline is rocky and steep-to. Sounding lines were run as close to the shoreline as conditions would permit.

H. - SOUNDINGS:-

Soundings were taken by means of an 808 Type Recording Fathometer, No. 51, operated on the fathom scale. Additional soundings were taken with a standard lead line. Standard methods were used throughout the survey. The fathometer initial was set correctly with a bar suspended exactly two fathoms below the

transceiver. The sounding was assumed to be correct at two fathoms for purposes of computing velocity corrections. This subject has been covered in a separate report which is hereby made a part of this report.

I. - CONTROL OF HYDROGRAPHY:-

All hydrography is controlled by three point sextant fixes on objects ashore. No unusual or substandard methods were used for this purpose. Fixes were taken at intervals of two minutes in general, and at such other lesser intervals as conditions warranted for good control. Soundings were recorded at 15 second intervals and all peaks or valleys were sdaled from the fathograms and recorded at the proper times.

J. - ADEQUACY OF SURVEY:-

The survey of the area is complete and is adequate to supersede previous surveys. Junctions with other surveys are satisfactory. The junction of depth curves at the western limit may be made somewhat difficult due to the very irregular character of the bottom and the sparseness of soundings on Sheet No. H-6655. (1940-41)

K. - CROSSLINES:-

The crosslines on the sheet constitute about 4.5 percent of the total sounding lines run including development work. Crossings on the boat sheet were satisfactory.

L. - COMPARISON WITH PRIOR SURVEYS:-

The original and only prior surveys made in this area are sheet H-2175, scale 1:40,000 and H-2176, scale 1:20,000 which were made in 1893. These surveys are not of sufficient detail to warrant comparison with the current work. Review, par. 5

M. - COMPARISON WITH CHART No. 8255:-

a. Features disproved:

1. Sunken rock - Lat. 56° 59.04'; Long. 135° 25.10'.
The least depth found on this shoal is ~~3.5~~ 3.6 fms. This area was carefully searched with a hand lead in addition to the fathometer work. The sunken rock symbol should be deleted. (deleted from chart)

2. Sunken rock - Lat. 56° 57.50'; Long. 135° 23.38' and the rock awash symbols which extend inshore from this point, do not exist or are incorrectly charted from rough sketching. There is a shoal 250 meters 293° True from this point which has a least depth of ~~1.5~~ 1.4 fms. These rock symbols should be deleted. (deleted from chart)

Smooth sheet figures in ink.

b. Discrepancies in soundings:

1. 2-3/4 fathom sounding in Lat. 56° 59.13'; Long. 135°23.80'.
The least depth on this shoal is ~~2.0~~ 1.6 fms. (1½ fms. now charted)

2. 4½ fathom sounding in Lat. 56° 58.48'; Long. 135° 24.15'.
The least depth on this shoal is ~~4.5~~ 4.3 fms. (4 fms. now charted)

3. Rock ~~awash~~, (P.D.) Lat. 56° 56.45'; Long. 135° 23.30'.

A rock covered ~~1.7~~ 1.5 fms at M.L.L.W. was found close to this point. The bottom was visible at the time the least depth was measured. The rock symbol should be replaced by the correct sounding. *(Rk. awash symbol replaced on chart by 1½-fm. sdg.)*

4. A least depth of ~~1.9~~ 1.8 fms was found at the charted 2½ fm sounding N. E. of Vasilief Bank, Lat. 56° 57.~~50~~'; Long. 135° 26.8~~2~~5'. *(1¾ fm. sdg. now charted)*

c. New shoals and dangers found:- See "N" below.

N. - DANGERS AND SHOALS:-

All charted shoals and dangers were found except as noted in paragraph "M". Additional shoals were found as listed below:-

Depth Fms.	Pos. No.	Latitude	Longitude
1.4	36aa	56° 56.48'	135° 25.63'
2.0	51u & 53u*	56° 57.48'	135° 27.12'
1.6	63u	56° ~~57.85~~'	135° 24.38'
~~0.4~~ (*)	1,2,& 3.1	56° 58.1~~1~~0 cov. 2 ft. MLLW	135° 24.82'
1.4*	18v	56° 57.5~~8~~15	135° 23.61'
2.~~3~~2*	23v	56° 57.36'	135° 23.2~~6~~5
1.4	6v	56° 58.~~50~~49	135° 24.~~50~~49
2.~~3~~2*	41v	56° 58.43'	135° 23.32'
1.~~5~~4*	42v	56° 58.5~~1~~'	135° 23.22'
2.2	116r	56° 58.83'	135° 23.58'
~~0.4~~ (*)	3ca	56° 58.92' cov. 2 ft. MLLW	135° 18.73'
0.6	89p	56° 59.26'	135° 19.41'
0.8	7ca	56° 59.1~~7~~4	135° 18.~~28~~48

** corrections are smooth sheet values*

All detached shoals were searched for least depth and complete notes covering these investigations will be found in the sounding records. Numerous rocks and shoal spots which lie close to the beach were investigated, but are not listed here. Attached to this report is a copy of a letter to the Director with advance information relative to new dangers discovered and located. *(2482 (47))*

O. - COAST PILOT NOTES:-

This subject has been covered under a special report for the Sitka Sound area.

P. - AIDS TO NAVIGATION:-

There are no aids to navigation in this area.

Q. - LANDMARKS FOR CHARTS:-

There are no landmarks recommended for charting in this area.

R. - GEOGRAPHIC NAMES:- 854

A special report on geographic names will be submitted. Two new names are recommended: Three Entrance Bay, which is located south of Cape Burunof, and Samsing Cove, which lies just East of Pirate Cove. All previously charted names were verified.

S. - SILTED AREAS:-

No silted areas were noted.

Z. - TABULATION OF APPLICABLE DATA:-

The following listed special reports are pertinent to this survey:-

Air Photo Inspection Report.
Descriptive Reports to Accompany Topographic (Graphic control) Sheets T-7045 (1947) (PA-D-47) Pirate Cove to Deep Inlet, and T-7046 (1947) (PA-E-47) Povorotni Point to Pirate Cove.
Temperature and Salinity Observations.
Coast Pilot Notes.
Geographic Names.

Applicable data attached to this report:-

Table of Statistics
Tide Note
Tables of Velocity Corrections (2)
List of Signals
Letter, 12 July 1947 - Dangers, Chart #8255 C.L. 482 (1947)

Submitted by

Karl B. Jeffers

Karl B. Jeffers
Lt. Comdr., C & G Survey

VELOCITY CORRECTIONS

U.S. Coast and Geodetic Survey

Ship PATTON

Glendon E. Boothe, Comdg.

Between 6 June 1947 and 17 June 1947

Locality: Sitka Sound, Povorotni

Point to Deep Inlet

Hydrographic Survey No. PA-1347

Launch No. 92
Table of Corrections

Depth				Corrections	
	to	4.9	fms.	0.0	fms.
5.0	"	9.9	"	-0.1	"
10.0	"	14.9	"	-0.2	"
15.0	"	20.0	"	-0.3	"
20.1	"	25.0	"	-0.4	"
25.1	"	30.1	"	-0.5	"
30.2	"	35.1	"	-0.6	"
35.2	"	45.7	"	-0.8	"
45.8	"	55.9	"	-1.0	"
56.0	"	66.1	"	-1.2	"
66.2	"	76.1	"	-1.4	"

LIST OF HYDROGRAPHIC SIGNALS
PA-1347
POVOROTNI PT. TO DEEP INLET

Hydrographic Name	Source
ABE	T-7045 PA-D-47
AE	T-7046 PA-E-47
ADAM	PA-E-47
ADC	PA-E-47
AL	PA-E-47
ALP	PA-D-47
AMY	PA-D-47
ANN	PA-E-47
ANT	PA-D-47
ARM	PA-D-47
BAG	PA-E-47
BAH	PA-D-47
BAT	PA-D-47
BED	PA-E-47
BEG	PA-E-47
BIB	PA-E-47
BIG	PA-E-47
BIL	PA-E-47
BOG	PA-E-47
BOB	PA-E-47
BON	PA-E-47
BOX	PA-D-47
BOY	PA-E-47
BUM	= WAG T-6889a
BUS	PA-E-47
CAB	PA-D-47
CAL	Tri. Sta. CALMING 1942
CAR	PA-E-47
CARD	Tri. Sta. CARD 1942
CAS	Tri. Sta. CASTOR 1947
CAT	PA-D-47
CAU	Tri. Sta. CAUTION 1942
COD	PA-D-47
CON	PA-D-47
COP	PA-D-47
CRY	PA-E-47
COW	PA-E-47
CUR	PA-E-47
	PA-D-47
DAW	PA-E-47
DAY	PA-D-47
DEB	PA-E-47
DIF	PA-E-47
DIM	PA-D-47
DIP	PA-D-47
DIX	PA-E-47
DOC	PA-E-47
DOE	PA-E-47
DOG	PA-E-47
DON	PA-E-47
DOR	PA-E-47
DUD	PA-E-47
DUN	PA-D-47
EAR	PA-E-47
EAT	PA-D-47
EBB	PA-E-47
EEL	PA-D-47
EGG	PA-E-47
ELM	PA-E-47
END	PA-E-47
ERA	PA-E-47
EVA	T-6889a
EXTRA	Tri. Sta. EXTRA 1938
FAR	PA-D-47
FAT	PA-D-47
FED	PA-E-47
FEW	PA-E-47
FEZ	PA-E-47
FIG	PA-E-47
FIN	PA-E-47
FIT	PA-E-47
FLAG	PA-E-47
FLY	PA-D-47
FOE	PA-D-47
FOG	PA-E-47
FOP	PA-D-47
FOX	PA-E-47
FRY	PA-E-47
FUN	PA-E-47
GAD	PA-D-47
GAG	PA-E-47
GAL	PA-D-47
GAS	PA-E-47
GEM	PA-E-47
GIG	PA-E-47
GIL	PA-E-47
GLAG	Tri. Sta. GLAG 1942
GOB	PA-E-47
GOT	PA-D-47
GUL	PA-E-47
GUM	PA-E-47
HAC	PA-E-47
HAG	PA-D-47
HAT	PA-E-47
HEM	PA-E-47
HER	PA-E-47
HID	PA-E-47

LIST OF HYDROGRAPHIC SIGNALS
PA—1347
POVOROTHI PT. TO DEEP INLET

Hydrographic Name	Source	Hydrographic Name	Source
)D	PA-E-47	MAR	PA-E-47
HOE	PA-E-47	MAW	PA-E-47
HOP	PA-D-47	MAX	PA-E-47
HC	T-6889a	MAY	PA-E-47
HOW	PA-D-47	MID	PA-D-47
HUB	Vol. 1	MOP	PA-E-47
HUM	PA-E-47	MOT	PA-E-47
ICE	PA-E-47	NAT	PA-D-47
IDA	PA-D-47	NED	PA-E-47
IMP	T-6889a	NEW	PA-E-47
ION	PA-D-47	NIL	PA-D-47
IRA	PA-E-47	NIP	PA-E-47
IRE	PA-E-47	NIX	PA-E-47
ITS	Tri. Sta. ITSKI 1938	NOD	PA-E-47
IVY	PA-E-47	NON	PA-D-47
		NOR	PA-D-47
JAP	PA-E-47	NOW	PA-D-47
JAR	PA-E-47	NUT	PA-E-47
JOY	PA-E-47		
JAW	PA-D-47	OAK	PA-E-47
JIM	PA-D-47	OB	Tri. Sta. OB 1942
JOE	PA-D-47	OBI	PA-D-47
JUG	PA-D-47	OFF	PA-E-47
		OLD	PA-E-47
KAMEN	Tri. Sta. KAMEN 1942	ORA	PA-D-47
KED	PA-E-47		
KEN	PA-D-47	PAD	PA-E-47
KEY	PA-D-47	PAL	PA-D-47
KID	PA-E-47	PEG	PA-E-47
KIM	PA-E-47	PET	PA-E-47
KOB	PA-E-47	PIE	PA-E-47
		PIG	PA-D-47
LAD	PA-E-47	PLY	PA-D-47
LAM	PA-D-47	POP	PA-E-47
LAX	PA-E-47	POT	PA-E-47
LAY	PA-D-47	PRO	Vol. 1
LEDG	Tri. Sta. LEDG 1942	PUP	PA-E-47
LEG	PA-E-47		
LEO	PA-D-47	RAG	PA-E-47
—	PA-E-47	RAIN	Tri. Sta. RAIN 1938
LETS	Tri. Sta. INLETS 1947	RAM	PA-E-47
LIZ	PA-D-47	RAT	Tri. Sta. PIRATE 1942
LOG	PA-E-47	REY	PA-D-47
LOW	PA-E-47	RIM	PA-D-47
LUG	PA-E-47	RIO	PA-E-47
LUX	PA-E-47	RIP	PA-D-47
		ROE	Tri. Sta. ROE 1942
MAG	PA-D-47	RUM	PA-E-47
MAL	PA-E-47	RUN	Tri. Sta. RUN 1938
MAN	PA-E-47		

LIST OF HYDROGRAPHIC SIGNALS
PA—1347
POVOROTNI PT. TO DEEP INLET

Hydrographic Name	Source	Hydrographic Name	Source
~~AD~~	PA-D-47	WAD	PA-E-47
SAG	PA-E-47	WAG	PA-D-47
~~SAI~~	~~PA-E-47~~	~~WAN~~	~~PA-E-47~~
SAN	Tri. Sta. SANDY COVE 1947	WAR	PA-E-47
SAL	PA-E-47	WAS	PA-D-47
SIR	PA-D-47	WAX	PA-E-47
SIS	PA-E-47	WE	Vol. 1
SKY	PA-E-47	WEE	PA-E-47
SNUF	Tri. Sta. SNUF 1942	WEN	PA-E-47
SO	Vol. 1	WET	PA-E-47
SOB	PA-E-47	WIG	PA-E-47
SOL	PA-E-47	WOO	PA-D-47
SOP	PA-E-47		
SOX	PA-E-47	YAK	PA-A-47
SUB	PA-D-47	YAM	PA-D-47
SUE	PA-E-47	YES	PA-B-47
TAP	PA E 47		
TAG	PA-E-47	ZAG	PA-E-47
TAN	PA-D-47	ZIG	PA-D-47
TAX	PA-E-47	ZOO	PA-D-47
TEE	PA-E-47		
TOM	PA-E-47		
TOY	PA-E-47		
~~TRI~~	Tri. Sta. TRI 1942		
~~TRY~~	~~PA-E-47~~		
USE	PA-E-47		
VAL	PA-E-47		
VAN	PA-E-47		
VET	PA-D-47		
VEX	PA-E-47		
VIM	PA-E-47		

7191

VELOCITY CORRECTIONS
U.S. Coast and Geodetic Survey
Ship PATTON
Glendon E. Boothe, Comdg.
Between 18 June 1947 and 19 July 1947
Locality: Povorotni Point to Deep Inlet.
Hydrographic Survey No. PA-1347 & PA-1247

* * * *

Launch No. 92
Table of Corrections

Depths						Corrections
					7.8 fms	0.0 fms
from	7.9 fms	to		14.8	"	-0.1 "
"	14.9 "	"		20.2	"	-0.2 "
"	20.3 "	"		25.7	"	-0.3 "
"	25.8 "	"		30.9	"	-0.4 "
"	31.0 "	"		41.3	"	-0.6 "
"	41.4 "	"		51.8	"	-0.8 "
"	51.9 "	"		62.6	"	-1.0 "
"	62.7 "	"		73.6	"	-1.2 "

COPY

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

POST-OFFICE ADDRESS: USC&GSS PATTON, Box 158, Sitka, Alaska

TELEGRAPH ADDRESS:

EXPRESS ADDRESS:

12 July 1947

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

Through: Supervisor, Northwestern District

Subject: Dangers - Chart #8255

The following listed shoals that are located on Chart #8255 are furnished herewith:

(1)
Rock covered ~~3~~ 2 ft. at M. L. L. W.
Breaks in moderate swell
Latitude 56° - 58'.~~11~~ 18 North
Longitude 135° - 24'.82 West

(2)
Least depth ~~1.7~~ 1.6 fms. at M. L. L. W.
Latitude 56° - 57'.85 North
Longitude 135° - 24'.38 West

(3)
Least depth 1.4 fms at M. L. L. W.
Latitude 56° - 58'.~~50~~ 49 North
Longitude 135° - 24'.49 West

(4)
Least depth 0.~~5~~ 6 fms. at M. L. L. W.
Latitude 56° - 59'.26 North
Longitude 135° - 19'.41 West

Above information subject to Office verification. Based on predicted tides for Sitka, from USC&GSS PATTON Boat Sheet #1347.

These locations have not been furnished the Coast Guard as these shoals are not in the steamer lanes, or where ships travel, except for the local fish boats. These men do not receive the Notice to Mariners, and many do not use charts, so this information would be of no value distributed in that manner.

Glendon E. Boothe
Lt. Comdr., C&GS
Cmdg., USC&GSS PATTON

GEB/dd

COPY

APPROVAL SHEET TO ACCOMPANY

SHEET PA-1347 (H-7191)

The hydrography on this sheet was executed under my direct supervision as a member of the hydrographic party.

The sounding records and boatsheet have been examined and approved by me. They were inspected daily during the survey. It is my opinion that the survey is adequate, and that no additional work is required.

The smooth sheet is to be constructed, and plotted by the Seattle Processing Office. The tidal data was supplied by the Washington Office from the record of the standard tide gage at Sitka.

The area covered by this survey is exceedingly rough and broken. The development required closely spaced lines, and much time was spent drifting and hand leading shoals.

18 December 1947

Glendon E. Boothe

Glendon E. Boothe
Lt. Comdr., USC&GS
Cmdg., Ship PATTON

H 7191 (PA 1347)

SE Alaska
Sitka Sound
Povorotni Point to Deep Inlet.

Processing Office Notes.

Smooth sheet.

The projection was made by hand on Whatman paper. In the area between Povorotni Point and Cape Burunof the topography was surveyed in 1942 on T 6888 and T6889 and this was transferred to the smooth sheet. New signals were established and located by planetable on sheet T 7046 in 1947. Some topographic features were shown on the latter sheet, and these usually duplicated the 1942 topography. Where there were differences in the shoreline or rocks the interpretations of T 6888 and T 6889 were held. Where new features were added on T 7046 they were transferred to the smooth sheet. *Where shoreline is lacking it is to be supplied from the air photo compilation when available. The following topographic signals located on T 6889 in 1942 were used on H 7191: (1947). *Shoreline added from T-8483 (1942-47)
Ice Snuf Imp Adam Hot Tri Eva Bum (Formerly Wag).

Shoals.

The dangers have been noted in the report of the field party. These have been checked and where the final reduction of the soundings differ from boat sheet readings used for the report the smooth sheet figure has been entered with a pen.

The three shoals developed on Vasilief Bank were seen as breakers to which cuts were made during the survey of H 6655. (1941) The two rocks awash on this bank were transferred from H 6948. (1943)

Two other rocks near ϕ 56 57.29 λ 135 25.31 were transferred from T 6888. (1942)

Note the 3.6 fm. sounding at ϕ 56 59.07 λ 135 25.12. A photo copy of H 6655 (1941) shows in pencil a sounding of 3 1/6 fathoms at ϕ 56 59.07 λ 135 25.09. There is a sunken rock symbol beside it. This looks like the plotting of additional work. (Skn. RK. disproved; 3.1-fm sdg. carried fwd. to pres. survey)

The rock at ϕ 56 56.65 λ 135 26.56 located by topo seems to be the object to which cuts were made on H 6655 (1941)

The least depths on many shoals have been pointed out on the smooth sheet.

Edgar T. Smith
Cart. Engr.
9/22/50

7191

TIDE NOTE

TYPE OF GAGE - Standard Automatic Tide Gage

LOCATION - Sitka, Baranof Island, Southeast Alaska.
Latitude 57° 02'.9; Longitude 135° 20'.3

PLANE OF REFERENCE - Mean Lower Low Water

The gage was operated and maintained by personnel of the Sitka Magnetic Observatory. The hourly heights of the tide were furnished by the Washington Office.

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STATISTICS FOR HYDROGRAPHIC SURVEY H-7191 (1947)

U. S. C. & G. S. S. PATTON; PROJECT CS-247

Date 1947	Day Letter	Vol. No.	H. L. & Wire Soundings	Positions	Statute Miles of soundings
6 June	a	1		192	32.0
9 "	b	1		92	15.6
10 "	c	2		217	36.2
11 "	d	2 & 3	1	233	35.4
12 "	e	3		50	7.7
13 "	f	3 & 4		193	24.7
16 "	g	4		132	17.1
17 "	h	4 & 5		264	32.6
18 "	j	5		173	20.0
19 "	k	5 & 6		245	31.8
20 "	l	6		221	19.1
21 "	m	7	1	51	4.2
23 "	n	7		103	13.9
24 "	p	7	2	89	11.5
25 "	q	7 & 8		82	11.6
26 "	r	8	10	121	13.6
2 July	s	8	12	104	9.1
7 "	t	8	2	49	4.9
8 "	u	9	10	64	5.3
9 "	v	9	40	43	- -
10 "	w	9	9	97	2.6
12 "	x	9	13	14	- --
14 "	y	9 & 10	15	145	9.7
15 "	z	10	12	195	19.8
16 "	aa	10 & 11	4	150	11.7
17 "	ba	11	17	90	5.3
18 "	ca	11	14	79	4.4
		Totals:	162	3488	399.8

Area Surveyed = 7.6 square statute miles.

H 7191 (Pa 1347)

Southeast Alaska
Sitka Sound
Povorotni Point to Deep Inlet

List of geographic names
pencilled on smooth sheet.

SITKA SOUND

BARANOF ISLAND

KULICHKOF ~~ISLAND~~ Rock

LONG ISLAND

DEEP INLET

SANDY COVE

* SAMSING COVE

PIRATE COVE

CAPE BURUNOF

* THREE ENTRANCE BAY

POVOROTNI POINT

KAMENNOI ISLAND

GLAGHOLM ISLAND

KITA ISLAND

VASILIEF BANK

*These two names are in the report on geographic names by Boothe 1947. All other names are from the charts.

GEOGRAPHIC NAMES

Survey No. H-7191

Name on Survey	A On Chart No.	B On previous survey No.	C On U. S. quadrangle Maps	D From local information	E On local Maps	F P. O. Guide or Map	G Rand McNally Atlas	H U. S. Light List	K	
Southeast Alaska										1
Sitka Sound										2
Baranof Island									USGB	3
Povorotni Point										4
Kamennoi Island										5
Glagolm Island										6
Kita Island										7
Vasilief Bank										8
Kulichkof Rock		(not Island)							USGB	9
Three Entrance Bay										10
Cape Burunof									USGB	11
Pirate Cove										12
Samsing Cove										13
Long Island										14
Sandy Cove										15
Deep Inlet										16
										17
Following names are OK if it is desired to use them:	(see Chart 8255 for placement)									18
										19
Mielkoi Cove										20
Calming Island										21
Obsechki Island										22
										23
				Names underlined in red are approved. 12-4-50 L. Heck						24
										25
Sitka		(location of tide gage)							USGB	26
										27

M 234

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. H-7191

Records accompenying survey:

Boat sheets 1; sounding vols. 11; wire drag vols. .....;

bomb vols. .....; graphic recorder rolls 5 envel.

special reports, etc. .....

.....

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

		Prelim.	Final
Number of positions on sheet		3488	
Number of positions checked		70	260
Number of positions revised		5	14
Number of soundings revised (refers to depth only)		19	30
Number of soundings erroneously spaced		4	8
Number of signals erroneously plotted or transferred			0
Topographic details	Time	1	74
Junctions	Time	3	109
Verification of soundings from graphic record	Time	1	3

Verification (Prelim.) by D.P. Engle ..... Total time 119 ... Date 3-6-52
(Final) " 656 9-13-54

Reviewed by J.A. Dinsmore ..... Time 48 ... Date 11 Oct. 1954

M-2232-1

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-7191 FIELD NO. PA-1347

Alaska, Sitka Sound, Povorotni Point to Deep Inlet

Project CS-247

Surveyed - June and July 1947 Scale 1:10,000

Soundings: Control:

808 Fathometer
Hand lead

Sextant fixes on shore signals

Chief of Party - G. E. Boothe
Surveyed by - G. E. Boothe and K. B. Jeffer
Protracted by - W. M. Martin
Soundings plotted by - W. M. Martin
Verified and inked by - D. R. Engle
Reviewed by - T. A. Dinsmore 11 Oct. 1954
Inspected by - R. H. Carstens

1. Shoreline and Signals

The shoreline originates with graphic control survey T-7046 of 1947, topographic surveys T-6888 and T-6889a of 1942 and air-photographic survey T-8483 of 1942-47.

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

2. Sounding Line Crossings

Considering the irregularities in the bottom, depths at crossings are in very good agreement.

3. Depth Curves and Bottom Configuration

The usual depth curves are adequately delineated except in foul areas which were too hazardous to run sounding lines.

Numerous rocks, ledges and pinnacles distributed freely throughout the area contribute to the extreme irregularities in the bottom. Many of these features are dangerous to navigation.

4. Junctions with Contemporary Surveys

Adequate junctions were effected with the following surveys:

H-6355 (1938-47), on the north
H-7190 (1947), on the northeast
H-7096 (1945), on the south
H-6948 (1942-43), on the southwest
H-6655 (1940-41), on the northwest

Several detached shoal areas on H-6655 and H-6948 have been closely developed on the present survey and are so indicated by reference notes on the aforementioned surveys.

5. Comparison with Prior Surveys

H-2175 (1893), 1:40,000 and H-2176 (1893), 1:20,000

The present survey falls within the area covered by these prior surveys. A comparison of the prior and present depths indicates no changes in bottom in the area. However, the widely spaced sounding lines on the prior surveys fail to reveal many shoals and pinnacles disclosed by the close development on the present survey.

The 20-fm. sounding charted in lat. 57°59.47', long. 135°18.90', from H-2176 falls in depths of 29-30 fms. on the present survey. The prior sounding is considered to be 10 fms. in error and should be disregarded.

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

6. Comparison with Chart 8255 (Latest print date 1/14/52)

A. Hydrography

Charted hydrography originates with the previously discussed surveys supplemented by partial application of the present survey prior to verification and review. Numerous minor revisions to smooth-sheet soundings have been made during verification. With the exception of the 20-fm. sounding mentioned in paragraph 5, no important discrepancies are noted in the charted soundings. However, the rock awash charted in lat. 56°59.66', long. 135°18.60', should be deleted from the chart. The present survey disproves the existence of a rock in the above location.

The present survey entirely supersedes the charted information.

B. Aids to Navigation

No aids to navigation are charted within the limits of the present survey. There are many dangers to navigation in the area.

7. Condition of Survey

a. The sounding records and Descriptive Report are complete and comprehensive.

b. The smooth plotting was accurately done.

c. The development of shoal areas and determination of least depths by use of the hand lead on pinnacle rocks and in kelp was particularly thorough on this survey.

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 necessary.

Examined and approved:

H. R. Edmonston
Chief, Nautical Chart Branch

E. R. McCarthy
Acting Chief, Division of Charts

G. R. Fish
Chief, Hydrography Branch

Earl O. Heaton
Chief, Division of Coastal Surveys

Vault

RHC

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

TIDE NOTE FOR HYDROGRAPHIC SHEET

~~Division of Hydrography and Topography~~ 11 December 1950

Division of Charts: R. H. Carstens

Plane of reference approved in
11 volumes of sounding records for

HYDROGRAPHIC SHEET 7191

Locality Sitka Sound, Alaska

Chief of Party: G. E. Boothe in 1947
Plane of reference is mean lower low water, reading
5.0 ft. on tide staff at Sitka
13.1 ft. below B. M. 8 (1924)

Height of mean high water above plane of reference is 9.1 feet.

Condition of records satisfactory except as noted below:

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

U. S. GOVERNMENT PRINTING OFFICE 756675

NAUTICAL CHARTS BRANCH

SURVEY NO. H-7191

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
8/13/51	8255	[signature]	Before ~~After~~ Verification and Review Partial Application
1/28/52	8252	S.G. McGann	Before ~~After~~ Verification and Review Partially applied. (2 sdgs changed.)
6-19-60	8252	[signature]	~~Before~~ After Verification and Review Completely appd
1-25-65	8255	[signature]	~~Before~~ After Verification and Review Completely appd
			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.