8467

Diag. Cht. No. 8102-3.

Form 504

U. S. DEPARTMENT OF COMMERCE

COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. PF-1259 *Office No.* H-8467

LOCALITY

State SOUTHEAST ALASKA

General locality PRINCE OF WALES ISLAND

Locality SKOWL ARM & McKENZIE INLET

1959

CHIEF OF PARTY

I. R. Rubottom

LIBRARY & ARCHIVES

DATE February 1, 1960

USCOMM-DC 5087

8467

Inc. 6
Cht.
8083
8002
8102
8142

To C322

This ~~O.C.~~ reviewed HDEG survey H-8467 is submitted for final indication on the Standards and examination for chart corrections and should be returned to Vault. Area Chief, please send chargeout slip to Vault.

Chief, Marine Surveys Division

OUT FOR SIGNATURE

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-8467

Field No. PF-1259

State ALASKA

General locality SOUTHEAST ALASKA

Locality PRINCE OF WALES ISLAND, SKOWL ARM & McKENZIE INLET

Scale 1:10,000 Date of survey 25 APRIL thru 22 MAY 1959

Instructions dated 27 NOVEMBER 1957, SUPPLEMENTAL INSTRUCTIONS 21 OCTOBER 1958

Vessel USC&GS Ship PATHFINDER

Chief of party IRA R. RUBOTTOM, CAPT, C&GS

Surveyed by H.D. NYGREN, P.J. TAETZ, H.E. McCALL, G. DeGROOT, F.X Poppet

Soundings taken by fathometer, ~~[illegible]~~ 808 Type

Fathograms scaled by SHIP'S PERSONNEL

Fathograms checked by SHIP'S OFFICERS

Protracted by G. DEGROOT

Soundings penciled by G. DEGROOT

Soundings in fathoms ~~feet~~ at ~~MLW~~ MLLW based on a theoretical

REMARKS: Velocity of 800 fm. per second

U. S. GOVERNMENT PRINTING OFFICE 698019

FORM CD-121 (9-22-59)
(PRES. BY A.O. 204-10)

UNITED STATES GOVERNMENT

Memorandum

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

TO : Captain Kenneth S. Ulm
Chief, Marine Data Division

DATE: March 17, 1964

FROM : John A. McCormick
Chief, Coast Pilot Branch

SUBJECT: Report on Special Processing of Hydrographic Smooth Sheet

REGISTER No. H-8467

Field No. PF-1259

State ALASKA

General locality SOUTHEAST ALASKA

Locality PRINCE OF WALES ISLAND, SKOWL ARM & McKENZIE INLET

Scale 1:10,000 Date of survey 25 APRIL thru 22 MAY 1959

Instructions dated 27 NOVEMBER 1957, SUPPLEMENTAL INSTRUCTIONS 21 OCTOBER 1958

Vessel USC&GS Ship PATHFINDER

Chief of party IRA R. RUBOTTOM, CAPT, C&GS

Surveyed by H.D. NYGREN, P.J. TAETZ, H.E. McCALL, G. DeGROOT, F.X. Poppet

Soundings taken by fathometer, 808 Type

Fathograms scaled by SHIP'S PERSONNEL

Fathograms checked by SHIP'S OFFICERS

Protracted by G. DEGROOT

Soundings penciled by G. DEGROOT

Soundings in fathoms at MLLW

Nautical miles of sounding lines	401.5
Square nautical miles of hydrography	8.15
Positions	4008
Soundings recorded	13956
Soundings not plotted	2730
Soundings penciled	11226

1. Purpose.-- Your April 20, 1961, memorandum to Captain Elliott B. Roberts, Assistant Director for Research and Development, says in part: "In accordance with the instructions of the committee, a verifier has been assigned to verify a smooth sheet under the close supervision of Mr. McCormick. . . . It is hoped as a result of this test sheet that modification of present verification and review procedures will be determined which will cut the time involved in processing smooth sheets without downgrading the survey for nautical charting purposes." Results of test were too discouraging to warrant immediate report or to continue experiments along same line.

2. Verification and/or inking.-- Verifiers were instructed to reconcile shoreline and rocks on H-8467 with unreviewed photo manuscripts T-11503, T-11504, 11506, T-11507, and T-11509 of 1958 or 1959; comparison was made with graphic control on aluminum-mounted sheets PF-A-59 and PF-B-59.

Dangers and Shoals listed in Descriptive Report were checked off and inked. Remainder of soundings on H-8467 were then inked almost entirely without reference to either sounding records or fathograms.

Cartographer John T. Gallahan began inking on 4/20/61 and continued for 112 hours. Navigation Specialist Cedric B. Samuel picked up the inking on 5/17/61 and continued for 40 hours. Mr. Gallahan began revision of shoreline and depth curves on 10/4/61 and continued for 34 hours. McCormick added approximately 20 more hours to addition and revision of curves. The three men totaled 206 hours, despite crash methods, on a survey which had only 11,226 penciled soundings, many of which were not inked; this averages out to a very unsatisfactory 54 soundings per hour.

3. Approval.-- I agree with Descriptive Report Approval Sheet (signed by Captain Ira R. Rubottom, USC&GS, on February 8, 1960), which says in part: "The Survey is complete and adequate for charting purposes and no additional Field Work is recommended." Largest-scale chart affected is 8142.

4. Recommendations.-- Abolish Washington verification and the catch-all Processing Offices; place the burden of inking its own surveys on each ship, which shall, if necessary, assign an officer to a subunit ashore. Abolish pre-survey and smooth-sheet reviews; let the chart compiler do his own reviewing just as he now does with blueprints and reports from other organizations.

John A. McCormick

John A. McCormick

DESCRIPTIVE REPORT TO ACCOMPANY HYDROGRAPHIC SURVEY H-8467

(Field No. PF-1259) Project CS-405 1959

USC&GS SHIP PATHFINDER, Ira R. Rubottom, Captain, C&GS, Commanding

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Scale: 1:10,000

Surveyed by: H. D. Nygren, P. J. Taetz, H. E. McCall, G. DeGroot, F. X. Popper

A. Project

Hydrography was done according to Instructions Project CS-405, Kasaan Bay, Southeast Alaska, dated 27 November 1957, and Supplemental Instructions dated 21 October, 1958.

B. SURVEY LIMITS AND DATES

This survey is on Prince of Wales Island, S.E. Alaska, and includes McKenzie Inlet and the portion of Skowl Arm between the longitudes of 132° 19' and 132° 25'.

Field work was begun on 25 April 1959 and finished on 22 May 1959. Junction was made with contemporary survey H-8466 (PF-1159) 1:10,000 on the west limit of this sheet. (Unverified as of December, 1966)

C. VESSEL AND EQUIPMENT

Hydrography was done by launches 1, 2, and 4, which were based on the ship. Launch 2 surveyed in McKenzie Inlet, Smith Cove, and the portion of Skowl Arm from the western limit of the sheet to a line connecting triangulation stations KHAY, 1958 and SAM, 1958, except for isolated developments in this area which were run by launch 4. Launches 1 and 4 made a junction with launch 2 and surveyed the area to the eastern limit of the sheet.

All soundings were obtained with 808 depth recorders calibrated for 800 fms/sec. Launch #1 used No. 57-22, Launch #2 used No. 57-23, and Launch #4 used No. 52 during the entire survey.

Bottom samples were obtained by Launch #4, using sounding machine No. H-132 and Sheave H-393 and a snapper cup.

D. TIDE AND CURRENT STATIONS

Two tide stations were used for obtaining tide reducers. No time or range corrections were applied. The observations from the tide station at Lat. 55° 24.71', Long. 132° 27.86' were used on May 5, 6, 7, and 8 until 1400.

Tide observations from the tide station located at Lat. 55°24.12', Long. 132° 19.74' were used on all other days.

No current stations were observed in this area.

E. SMOOTH SHEET

The Smooth Sheet was made by hand aboard the USC&GSS PATHFINDER.

The shoreline was transferred by blueline impressions of appropriate manuscripts.

The Signals were transferred from Graphic Control Sheets PF-A-59 and PF-B-59 by standard methods. Triangulation stations were plotted by standard methods. Other signals were transferred from manuscripts T-11506 and T-11509 after adjustment on the manuscripts by sextant cuts (see paragraph F).

F. CONTROL STATIONS

Triangulation control used on this sheet was: END, 1924(FBTS), KISK, 1958(FBQ), PAUL, 1958(FBQ), SKIM, 1958(FBQ), MARG, 1958(FBQ), TOTE, 1958(FBQ), SAM, 1958(FBQ), SALL, 1958(FBQ), SALTERY COVE LIGHT, 1958(FBQ), KHAY, 1958(FBQ), KENZ, 1958(FBQ), FUST, 1958(FBQ) and CAN 2, 1958(FBQ).

Control stations in Smith Cove, Skowl Arm and the portions of McKenzie Inlet north of the Sentinel Islands were located by standard methods(graphic control) on Graphic Control Sheets PF-A*59 and PF-B-59. Control stations south of the Sentinel Islands in McKenzie Inlet were located on single lens photographs and transferred directly to manuscripts T-11506 and T-11509. Because of the very poor quality and coverage of the photographs, many of the signals were inaccurately located. Rounds of sextant angles were taken at various signals. Templates of these angles were made and the station locations adjusted accordingly on the manuscripts.

The resulting locations of all signals are considered adequate for controlling hydrography in south McKenzie Inlet. The signals on the rest of the sheet are adequate.

G. SHORELINE AND TOPOGRAPHY

The shoreline came from blueline impressions of Advance Topographic Manuscripts T-11506 and T-11509, T-11504, T-11503.

No indications of the foul area at 55° 25.62' N and 132° 24.80'W were found.

Launch #1 positions 21, 22, 29, 30, 31a and 165, 167b plot on the shore of the islands in the vicinity of 55° 25' and 132° 20' and it is suspected that the shoreline in this area might be misplaced, because of heavy shadows on the photographs. *Mostly minus depths. Uninked.*

The low water line was not always determined because of very steep beaches and offlying reefs and foul areas in certain areas.

H. SOUNDINGS

All soundings were obtained with the equipment listed in Section C.

Depth recorders were calibrated for a velocity of 800 fms/sec and in accordance with Section 822(revised) of the Hydrographic Manual, no velocity corrections were applied. Initial settings were maintained at 0.0 fathoms and separate corrections were entered in the sounding volumes where the initial deviated from 0.0 fathoms.

The basic corrections were derived from the 2 fathom bar check readings, taken with conventional equipment. Bar Check corrections were also determined for other depths. As additional checks, vertical casts were taken with a hand sounding machine and registering sheave. Phase comparisons were made to the B and C scales.

RPM checks were made daily, reed tachometers were watched to insure operation at the proper calibration speed. Paper travel tests were run to verify the calibration. All stylus arm lengths were checked by a comparison of fix marks with a standard template.

I. CONTROL OF HYDROGRAPHY

All hydrography was controlled by three-point sextant fixes on triangulation and signals previously established on-shore.

J. ADEQUACY OF SURVEY

This survey is considered to be complete and adequate to supersede prior surveys for charting purposes. Smith Lagoon, lying to the northwest of Smith Cove, was not sounded. Even though there is some deep water in the Lagoon itself, the entrance channel is considered too foul for navigation.

Junction was satisfactorily made with H-8466(PF-1159) on the western limit of this sheet. H-8466 unverified as of 12-30-'66

The 2 4 fms/280 M sounding SW of triangulation station TOTE, 1958 was inadvertantly not developed in detail and that depth is possibly not the shoalest. 55°25.6'N., 132°24.4'W.

K. CROSSLINES

Crosslines made up 13% of the hydrography. Crosslines were in good agreement and theappparent discrepancies could be resolved on the fathograms as areas of extremely sharp drop-offs where a slight difference in position could cause a substantial change in depth.

L. COMPARISON WITH PRIOR SURVEYS

Comparison with H-2757b (1905, 1:20,000) and H-4439a (1924, 1:20,000) was made. In general, agreement was good, however, the old survey was of a reconnaissance nature and the new survey should supersede it. The old survey was from 1 to 10 fathoms deeper in spots than this survey.

Red crayon by McCormick

L

1. A sounding of 13 fms at 55° 23.73' N and 132° 21.94' W should replace the 18 fm sounding there. 5-6 "e", vol. 4, p. 28

2. The 20 fm curve extends offshore in the area of 55° 24.0' N and 132° 2~~1~~.~~4~~6' W far enough to include the 19 fm sounding on the presurvey review. 17 fm. pos. 69-70 "j", vol. 6, p. 40

3. A sounding of 11~~2~~ fms at 55° 24.50' N, 132° 21.95' W verifies the 11 fm sounding charted near there. pos. 179-180 "e", vol. 14, p. 9

4. A rock which uncovers ~~6~~ 5 feet at MLLW was found in Paul Bight at 55° ~~24.37'~~ 24.51' N and 132° 23.85' W and from the position given in the presurvey review and in the Coast Pilot, it was decided that this is the rock* mentioned in the Coast Pilot Inspection Report of 1931. pos. 156 "j", vol. 6, p. 57, must be the rock in question. It is awash at MLLW and it is part of an extensive reef.

* rock reported was covered. See following note See also Review 7A(3) regarding 33 fm shoal to the southwest.

5. A sounding of 10~~4~~ fms at 55° 24.78' N and 132° 23.07' W should replace the 12 fm sounding there. pos. 98-99 "e"; Launch 4, vol. 13, p. 61

6. A sounding of 4~~3~~ fms at 55° 25.12' N and 132° 20.20' W which is an extension of the 5 fm curve offshore includes the 4 3/4 sounding on the presurvey review. "b" day, Launch 1, pos. 45-46 and 184-185, vol. 15, p. 41 and 68

7. A sounding of 12 fms at 55° 25.13 N and 132° 18.95' W should replace the 19 fm sounding charted there. pos. 85-86 "e", Launch 4 vol. 13, p. 58

8. A rock with ~~3'~~ 0.6 fathom of water over it at MLLW was found in the entrance to Smith Cove at 55° ~~25.05'~~ 26.04' N and 132° ~~20.0'~~ 19.97' W which should be charted in that position. pos. 12 "p", vol. 10, p. 61

M. COMPARISON WITH CHART

Comparison was made with Chart 8142, 2nd Edition (May 1954), revised December 1956. Soundings on this chart originate with the surveys compared in Paragraph L except for corrections added in Smith Cove from a reconnaissance survey made in 1958. This survey supersedes information furnished by the reconnaissance survey.

The same general comments apply as were made in Paragraph L.

N. DANGERS AND SHOALS

The following are newly found dangers and shoals:

	Position (Degrees & Min.)		Vessel	Position No.	Depth
1.	55 24.51 132 23.85		T-11506 vol. 6, p. 57 Launch 2	Verified by Field 155 j See #4 under paragraph "L" (above)	Unc 5' at MLLW
2.	55 25.57 132 ~~24.06~~ 24.36		Launch 2 vol. 7, p. 33	95 k ½ out See last sentence Par. "J".	2.4 fms
3.	55 25.475 132 24.80		Launch 2 vol. 7, p. 36	149 l 2½ out pos. 112-113 "k"	2.4 fms

Red crayon by McCormick

par IV

	Position (Degrees & Min.)		Vessel	Position No.	Depth
4.	55 132	25.97 23.73	Launch 2	83 g vol. 5, p. 20	1.3 fms
5.	55 132	25.80 79 24.00	Launch 2	178 f vol. 2, p. 65	Awash at MLLW
6.	55 132	25.82 ~~24.71~~ 24.80	T-11506 vol. 7, p. 41 Launch 2	Verified by Field Inspec. ~~138~~ k 137k x(2)	Uncovered ~~1'~~ ½ at MLLW
7.	55 132	24.80 also H-8466, vol. 2, p. 7 21.87	Launch ~~2~~	131e~~k~~ vol. 4, p. 54	Awash at MLLW
8.	55 132	23.57 21.68	Launch 4	2nd out 126 c vol. 12, p. 45	2.4 fms
9.	55 132	24.52 21.7~~3~~5	Launch 2	3½ out 7 n vol. 9, p. 29	3.2 fms
10.	55 132	24.93 21.~~20~~18	Launch 2	39 h 3rd out vol. 5, p. 66	6.9 fms
11.	55 132	26.04 19.97	Launch 2	12 q vol. 10, p. 61	0.6 fms Rk
12.	55 132	26.08 20.14	Launch 2	222 m 2½ out vol. 9, p. 10	5.1 ~~5.6~~ fms
13.	55 132	26.18 20.35 4	Launch 2	1 a vol. 2, p. 4	Awash ~~Uncovered~~ ~~1'~~ at MLLW
14.	55 132	26.32 20.26	Launch 2 (Q)	2a - 3a vol. 2, p. 4	Awash MLLW
15.	55 132	24.~~96~~ 4 19.84	Launch 4	20 e vol. 13, p. 44	1.9 fms Rk
16.	55 132	24.71 19.75	Launch 4 1fm Rk	27 e vol. 13, p. 45	~~Awash~~ MLLW
17.	55 132	24.18 19.49	Launch 4	45 d vol. 12, p. 72	4.~~1~~6 fms
18.	55 132	25.18 3 19.65 4	Launch 1	160 b vol. 15, p. 63	8.0 fms
19. NO	~~55~~ ~~132~~	25.02 ~~24.94~~ ~~20.74~~ .68	~~Launch 1~~ ← May mean information inked in red.	~~2½ out 49 k~~ 214-215 "b" vol. 16, p. 6	~~9.7 fms~~ 9.7 fms.
20.	55 132	23.59 22.65	Launch ~~2~~ 3 ←→ ???	240-241 q (vol. 11, p. 33)	Uncovered ~~1'~~ at MLLW (0) from 55

May 22, 1959 time 07:11 and 07:17 {Cannot be Launch 2 this time this date} {Pos. of Launch 2 this time this date in vol. 10, p. 61}

Red crayon by Mc Cormick

par IV

Position (Degrees & Min)	Vessel	Position No.	Depth
21. 55 24.62 132 19.81	Launch 4	4 d vol. 12, p. 63	Awash at MLLW
22. 55 26.25 132 21.25	Launch 2	½ out 33 q vol. 10, p. 64	3.8 fms

O. COAST PILOT INFORMATION

A separate Coast Pilot Report, titled "Coast Pilot Notes, Southeast Alaska, No. 8, Dixon Entrance to Yakutat Bay" has been forwarded. (See Z)

P. AIDS TO NAVIGATION

The position of Saltery Cove Light has been reported on Form 567 (see Z). There are no other aids to navigation in the area.
(Light and structure removed. See N.M. 29-'65, Par. 4214)

Q. LANDMARKS FOR CHARTS

No landmarks have been listed for charting.

R. GEOGRAPHIC NAMES

A separate report, titled"Geographic Names Report, Project CS-405", has been forwarded (see Z).

S. SILTED AREAS

Bottom Samples and the quality of the fathometer return indicate that McKenzie Inlet south of the Sentinel Islands is a silted area with a soft, sticky mud bottom. Apparent depths of the silt could not be determined. Attention is also called to dome-shaped profile as evidenced on Launch #2 b, c, and d day fathograms in McKenzie Inlet.

Z. TABULATION OF APPLICABLE DATA

1. Coast Pilot Notes, Southeast Alaska No. 8, Dixon Entrance to Yakutat Bay - forwarded to Director
2. Geographic Names Report, Project CS-405 - forwarded to Director
3. Nonfloating Aids or Landmarks for Charts, Form 567 - forwarded to Director
4. Graphic Control Sheets PF-A- 59 and PF-B-59 - forwarded to Director
5. Descriptive Report to Accompany Graphic Control Sheets PF-A-59 and PF-B-59 - forwarded to Director
6. Topographic Incomplete Manuscripts T-11506, T-11509, T-11503, T-11504, and T-11507 - to be forwarded.
7. Blue line impressions of Advance Topographic Manuscripts T-11503, T-11504, T-11506, T-11507, and T-11509 - to be forwarded

8. Tide Station Report (Form 681) for Saltery Cove Tide Gage - forwarded to Director

9. Level Record (Form 258) for Saltery Cove Tide Gage - forwarded to Director

10. 8 Marigrams from Saltery Cove Tide Gage - forwarded to Director

11. Recovery Notes for Triangulation Station SKIM, 1958; TOTE, 1958; PAUL, 1958; KISK, 1958; MARG, 1958; KENZ, 1958; FUST, 1958; KHAY, 1958; END, 1924; SAM, 1958; CAN 2, 1958; PETE, 1958; SALL, 1958 - forwarded to Director

12. 28 Fathograms
"b" through "q" day - Launch 2)
"a" through "b" day - Launch 1) - To be forwarded
"a" through "e" day - Launch 4)

13. 3 Copies of Boat Sheet PF-1259 - to be forwarded

14. 7 Marigrams from North Polk Tide Gage - forwarded to Director

Respectfully submitted,

Glenn DeGroot

Glenn DeGroot
Ensign, C&GS

PROJECT CS*405
STATISTICS FOR HYDROGRAPHIC SURVEY

H-8467 - (PF-1259)

1959

USC&GSS PATHFINDER

VESSEL	DATE	DAY	LTR	VDL	NO. POS.	WIRE SOUND	N. MI SOUNDING
LCH 1	21	May	"a"	15	104	0.0	9.8
	22	May	"b"	15&16	248	0.0	19.9
LCH 2	25	Apr	"a"	2	3	0.0	0.0
	5	May	"b"	2	122	0.0	16.8
	6	May	"c"	3	119	0.0	16.5
	7	May	"d"	3&4	277	0.0	30.8
	8	May	"e"	4	130	0.0	13.2
	9	May	"f"	4&2	177	0.0	26.0
	11	May	"g"	5	256	0.0	32.9
	12	May	"h"	5&6	167	0.0	17.2
	13	May	"j"	6&7	270	0.0	32.0
	14	May	"k"	7	195	0.0	20.7
	18	May	"l"	7&8	211	0.0	22.0
	19	May	"m"	8&9	295	0.0	28.2
	20	May	"n"	9&10	244	0.0	25.9
	21	May	"p"	10	234	0.0	22.9
	22	May	"q"	10&11	239	0.0	17.7
LCH 4	11	May	"a"	vol. 12	21	21	0.0
	13	May	"b"	vol. 12	42	42	0.0
	20	May	"c"	vol. 12	209	0.0	15.4
	21	May	"d"	vol. 12-13	244	0.0	19.7
	22	May	"e"	vol. 13-14	201	0.0	13.9
					4,008	63	401.5

Total N. miles of Sounding Line — 401.5
Total Area of Hydrography(square N. miles) — 8.15
Total N. miles of Crosslines — 47.3

* * * * * * * * * * * * * * * * * * * *

Nautical miles of sounding lines	401.5
Square nautical miles of hydrography	8.15
Positions	4008
Soundings recorded	13956
Soundings not plotted	2730
Soundings pencilled	11226

- - Coast Pilot analysis - 5/9/61

ABSTRACT OF FATHOMETER CORRECTIONS

TO ACCOMPANY HYDROGRAPHIC SURVEY

H-8467 (PF-1259)

USC&GSS PATHFINDER

1959

LAUNCH #1 FATHOMETER #57-22 (all days)

The correction for all depths (on the appropriate scale) is:

A scale + 0.3 fathoms
B scale - 0.6 fathoms
C scale - 1.8 fathoms

LAUNCH #2 FATHOMETER #57-23 (all days)

The correction for all depths (on the appropriate scale) is:

A scale + 0.3 fathoms
B scale - 0.6 fathoms
C scale - 1.6 fathoms

LAUNCH #4 FATHOMETER #52 (all days)

The correction for all depths (on the appropriate scale) is:

A scale + 0.2 fathoms
B scale + 3.0 fathoms
C scale None determined

LIST OF SIGNALS TO

ACCOMPANY HYDROGRAPHIC SURVEY

(H-8467 - PF-1259)

USC&GSS PATHFINDER

1959

NAME	SOURCE	NAME	SOURCE
Aha	Sextant cuts	Fly	PF-A-59
Alt	SALTERY COVE LIGHT, 1958	Fro	T-11509
		FUST	FUST, 1958
Big	T-11506	Gin	T-11509
Box	PF-A-59	Gus	PF-A-59
Bus	PF-A-59	Hut	Sextant cuts
But	PF-A-59	Ivy	Sextant cuts
CAN 2	CAN 2, 1958	Jar	PF-A-59
Cod	PF-A-59	Jim	PF-B-59
Cow	Sextant cuts	Job	Sextant cuts
Cur	PF-A-59 & Sextant cuts	Joe	PF-A-59
Deb	PF-A-59	Joy	PF-B-59
Dip	T-11509	Jut	PF-B-59
Dog	Sextant cuts	Kay	T-11509
Duo	PF-A-59	KENZ	KENZ, 1958
Eat	PF-A-59	KHAY	KHAY, 1958
Elf	T-11509	KISK	KISK, 1958
END	END,1924	Leg	PF-A-59
Est	PF-A-59	Leo	PF-B-59
Eva	Sextant cuts	Let	PF-B-59

LIST OF SIGNALS TO

ACCOMPANY HYDROGRAPHIC SURVEY

(H-8467 - PF-1259)

USC&GSS PATHFINDER

1959

NAME	SOURCE	NAME	SOURCE
Lip	PF-B-59	Odd	PF-B-59
Liz	Sextant cuts	Ohm	PF-B-59
Log	PF-A-59	Oil	T-11509
Lug	PF-B-59	Old	PF-B-59
Mad	PF-B-59	Ora	PF-A-59
Man	PF-A-59	Orb	PF-B-59
MARG	MARG, 1958	PAUL	PAUL, 1958
Maw	PF-B-59	Peg	PF-A-59
Max	PF-A-59	Pep	PF-B-59
May	PF-B-59	Pet	PF-B-59
Mid	PF-B-59	PETE	PETE, 1958
Moo	T-11509	Pie	PF-A-59
New	PF-B-59	Pin	PF-B-59
Nig	PF-B-59	Pit	PF-B-59
Nil	PF-B-59	Pot	PF-A-59
Nit	PF-B-59	Pro	PF-B-59
Nix	PF-A-59	Pug	PF-B-59
Nub	PF-B-59	Pup	T-11509
Nul	PF-B-59	Put	PF-B-59
Nut	T-11509	Rev	PF-A-59

LIST OF SIGNALS TO

ACCOMPANY HYDROGRAPHIC SURVEY

(H-8467 - PF-1259)

USC&GSS PATHFINDER

1959

NAME	SOURCE	NAME	SOURCE
Rim	PF-B-59	Sue	PF-B-59
Roy	PF-B-59	Tap	Sextant cuts
Rub	PF-B-59	Tax	PF-B-59
Rum	T-11509	Tex	Sextant cuts
SALL	SALL, 1958	Tom	PF-A-59
SAM	SAM, 1958	Top	PF-B-59
She	Sextant cuts	TOTE	TOTE, 1958
Sic	PF-B-59	Toy	Sextant cuts
Sip	PF-A*59	Tub	Sextantscuts
Sir	PF-A*59	Unk	Sextant cuts
Sit	PF-B-59	Vet	PF-B-59
Ski	PF-B-59	Vim	Sextant cuts
SKIM	SKIM, 1958	Was	PF-B-59
Sol	PF-A-59	War	PF-B-59
Sop	PF-B-59	Wee	PF-A-59
Sow	PF-B-59	Wen	PF-B-59
Sox	T-11509	Who	PF-B-59
Sty	PF-B-59	Woo	T-11509
		ZEE	Hydro. Signal (next page)

LIST OF SIGNALS TO

ACCOMPANY HYDROGRAPHIC SURVEY

H-8467 - (PF-1259)

USC&GSS PATHFINDER

1959

NAME	SOURCE
Yam	T-11509
Yea	PF-A-59
Zee	Sextant cuts
Zip	Sextant cuts

Form 567
April 1945

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

TO BE CHARTED
~~TO BE DELETED~~ } STRIKE OUT ONE

6 January, 1960

I recommend that the following objects which have *(have not)* been inspected from seaward to determine their value as landmarks be charted on *(deleted from)* the charts indicated.

The positions given have been checked after listing by F. X. Popper

Irv R. Rubottom
Chief of Party.

STATE / CHARTING NAME	DESCRIPTION	SIGNAL NAME	POSITION LATITUDE * ° ′	LATITUDE * ″ D.M. METERS	LONGITUDE * ° ′	LONGITUDE * ″ D.P. METERS	DATUM	METHOD OF LOCATION AND SURVEY No.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
SALTERY COVE LIGHT	FL. W., 4s(0.4s fl) Small White House on small islet	Alt	55 24	43.34 1340.3	132 20	16.73 294.3	NA1927	Triang. Intsec. Station	1958		x		8142 8102
↑	Light and structure removed. See N.M. 29-'65, Par. 4214												

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *nonfloating*

APPROVAL SHEET

H-8467 - PF-1259

The Field Work on this survey was inspected daily. The records and the Smooth Sheet have been examined and are approved.

The Survey is considered complete and adequate for charting purposes and no additional Field Work is recommended.

Ira R. Rubottom

IRA R. RUBOTTOM
CAPT, C&GS
COMDG, Ship PATHFINDER

8 February 1960

TIDE NOTE TO ACCOMPANY HYDROGRAPHIC SURVEY

H-8467 - (PF-1259)

1959

USC&GSS PATHFINDER

Two Tide Gages were used for the tide reducers on this survey, each on separate days. No time or range corrections were applied.

NORTH POLK TIDE GAGE - MLLW on Staff - 8.6 feet

Lat 55° 24.71' Long 132° 27.86'

This gage was used on May 5, 6, and 7; on May 8 until 1400.

SALTERY COVE TIDE GAGE - MLLW on Staff - 6.2 feet

Lat 55° 24.12' Long 132° 19.74'

This Gage was used for all times and days not listed above.

There was no division of the area into zones. The gages listed above, according to letter, reference no. 36-256-982 pat, from Chief, Tides and Currents, could be used interchangeably.

RHC

Form 712
DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
Rev. Apr. 1950

TIDE NOTE FOR HYDROGRAPHIC SHEET

~~Division of Coast and Geodetic Survey~~ 26 April 1960

Division of Charts: R. H. Carstens

Plane of reference approved in
16 volumes of sounding records for

HYDROGRAPHIC SHEET 8467

Locality Prince of Wales Island, Alaska

Chief of Party: I. R. Rubottom in 1959
Plane of reference is mean lower low water, reading
6.2 ft. on tide staff at Saltery Cove
15.8 ft. below B. M. 1 (1921)

Height of mean high water above plane of reference is 12.9 feet

15.4 MHHW

Condition of records satisfactory except as noted below:

William Shofnos
Chief, Tides Branch
~~Chief, Division of Tides and Currents~~

U. S. GOVERNMENT PRINTING OFFICE 877033

FORM 197
(3-16-55)

GEOGRAPHIC NAMES

Survey No. H-8467

Name on Survey	A On Chart No. 8142	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 B.G.N	
East Sentinel Island	x									1
Khayyam Point	x									2
McKenzie Inlet	x								x	3
McKenzie Rock	x									4
Old Kasaan Village(dés.)	x									5
Old Tom Creek										6
Paul Bight	x								x	7
Peacock Island	x									8
Prince of Wales Island	x									9
Saltery Cove	x									10
Skowl Arm	x									11
Smith Lagoon										12
West Sentinel Island	x									13
Thumb Point	*									14
Giants Head Point	*									15
										16

George M. Case
GEOGRAPHIC NAMES SECTION
8 MARCH 1960

* These two names, although shown on chart 8142, were questioned by the Staff Geographer and therefore omitted from this survey. They will be submitted to the Board of Geo. Names for verification 1-1-70 GMC

17 18 19 20 21 22 23 24 25 26 27

Form 946

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. 8467

Records accompanying survey: Smooth sheets 1;

boat sheets 3; sounding vols. 16; wire drag vols. ;

Descriptive Reports 1; graphic recorder envelopes 6;

special reports, etc. .....

.....

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

Number of positions on sheet		Review 4008
Number of positions checked		95
Number of positions revised		0
Number of soundings revised (refers to depth only)		9 {to adjust curves
Number of soundings erroneously spaced		0
Number of signals erroneously plotted or transferred		0
Topographic details	Time	7 hrs.
Junctions	Time	0
Verification of soundings from graphic record	Time	17 hrs.
Special adjustments Test sheet. See page 1, this D.R. signed J. A. McC. Reviewer examined inked smooth sheet against sounding volumes, fathograms, T-sheets and D.R.	Time	

Verification by Gallahan, Samuel McCormick Total time 206 hrs. Date 10/4/61

Reviewed by 5 Rose Time 245 hrs. Date June 5 1967

Cor. Insp. D. L. Ramsburg 4-15-76 5 1/2 hrs.
- D. R. Engle 6-25-77 13 hrs

US COMM C&GS DC

OFFICE OF MARINE SURVEYS AND MAPS

MARINE SURVEYS DIVISION

HYDROGRAPHIC SURVEY REVIEW

REGISTRY NO. H-8467 FIELD NO. PF-1259

Southeast Alaska, Prince of Wales Island, Skowl Arm and McKenzie Inlet

SURVEYED: April 25 - May 22, 1959

SCALE: 1:10,000 PROJECT NO.: CS-405

SOUNDINGS: 808 Fathometers CONTROL: Sextant Fixes on Shore Signals

Chief of Party	I. R. Rubottom
Surveyed by	H. D. Nygren
	P. J. Taetz
	H. E. McCall
	G. DeGroot
	F. X. Popper
Protracted by	G. DeGroot
Soundings Plotted by	G. DeGroot
Verified and Inked by	J. T. Gallahan
	C. B. Samuel
	J. A. McCormick
Reviewed by	S. Rose
	Date: June 5, 1967
Cursory inspection made--survey processing considered complete	D. J. Romesburg April 15, 1976

1. Description of the Area

This survey covers Skowl Arm from Giants Head and Smith Cove to longitude 132°25' and all of McKenzie Inlet. The shoreline is generally rocky and steep. The bottom is rocky and uneven near shore with numerous pinnacle rocks. In the greater depths the bottom is covered by sand and mud.

2. Control and Shoreline

The control is adequately described in the Descriptive Report.

Portions of the shoreline originate with the following Class I (unreviewed) photogrammetric manuscripts:

A. T-11503 of 1954 and 1956 photography and field edited in 1958 and 1963.

B. T-11504 of 1954, 1956, and 1958 photography and field edited in 1958 and 1963.

C. T-11507 of 1954 and 1956 photography and field edited in 1963.

The remaining shoreline originates with Class II photogrammetric manuscripts T-11506 and T-11509 of 1954 photography.

The mean high water line on the present survey is shown for guidance only and, except for any revisions in red by the hydrographer, its true position is shown on the topographic surveys previously mentioned.

3. Hydrography

Sounding line crossings are in good agreement.

Depth curves are adequately delineated.

The bottom configuration and least depths are well developed.

4. Condition of the Survey

The field plotting, sounding records, and the Descriptive Report are adequate and conform to the requirements of the Hydrographic Manual except as follows:

A. Fathograms for c- and d-day, Launch No. 2, and e- and d-day, Launch No. 4, were not annotated properly to show line breaks, turns, etc.

B. Minor initial problems were evident on the fathograms for d-day, Launch No. 4.

C. The verifier's report was not completed.

D. Many illegible soundings had to be redrafted by the reviewer because of the crash inking methods employed during verification.

E. All fathograms were rescanned by the reviewer as several peaks were overlooked during the initial scan by the verifiers.

F. Several unsupported shoals that arise on single sounding lines were not investigated to attain their least depths.

5. Junctions

The junctions with H-8466 (1959) on the west and H-8770 (1963) on the east are discussed in the reviews of those surveys.

6. Comparison with Prior Surveys

A. H-1649b (1885) 1:80,000
H-2757b (1905) 1:20,000
H-4439a (1924) 1:20,000

Taken together, these surveys comprise the latest coverage of the area of the present survey. A comparison between the prior and the present surveys was limited because of the smaller scale, poor control, and paucity of soundings on the prior surveys. Where a comparison was possible, soundings were found to be in good agreement and any differences could be attributed to the factors noted above and to the early method of lead line surveying versus the fathometer utilized today. Changes in the bottom configuration were revealed by the better development on the present survey; however, several depths and a rock awash were carried forward from H-2757b (1905) and H-4439a (1924) to supplement the present survey.

With the addition of the above items, the present survey is adequate to supersede the older surveys within the common area.

B. H-4439b (1924) WD 1:20,000

No conflicts exist in the common area between present survey depths and the effective depths of this wire-drag survey. Two soundings from the wire-drag survey were carried forward to supplement present depths.

7. Comparison with Chart 8142 (17426), 9th Ed., February 8, 1975

A. Hydrography

The charted hydrography originates with the partial application of soundings from the boat sheet and the verified and reviewed smooth sheet of the present survey.

Attention is directed to the following:

(1) The logging camp and log storage area charted in the vicinity of latitude 55°24.3', longitude 132°24.54' originates with Chart Letter 231 of 1965 subsequent to the date of the present survey and should be retained on the chart.

(2) The rock awash charted in latitude 55°26.2', longitude 132°21.61' originates with U.S. Geological Survey Quadrangle Craig (B-2) Alaska. Topography on this quadrangle is based on aerial photography of 1948 and was not field checked. No rock was found at this location on Class I (unreviewed) photogrammetric manuscript T-11503 which was compiled from aerial photography

of 1954 and 1956 and field edited in 1958 and 1963. In addition, no evidence was found to support the existence of this rock on the present survey and it is recommended that the rock be deleted from the chart.

(3) A sunken rock (Presurvey Review Item No. 3) previously charted in Paul Bight originated with Chart Letter 814 of 1931, a Coast Pilot Inspection Report. Described as a sunken rock with five feet of water over it located in the northern part of Paul Bight, the sunken rock symbol was apparently deleted from the chart based on preliminary data from the present survey. Several rocks awash were located in Paul Bight on the present survey; however, a shoal with a 3.2-fathom depth was found near the reported position of the sunken rock. As no investigation for a least depth on this shoal was attempted on the present survey, it is recommended that the sunken rock symbol be recharted at the position of this shoal until a least depth can be determined for this feature.

Except as noted above, the present survey is adequate to supersede the charted hydrography within the common area.

B. Aids to Navigation

Saltery Cove Light, positioned on the present survey in latitude 55°24.72', longitude 132°20.28', was removed in 1965.

8. Compliance with Instructions

The survey adequately complies with Project Instructions.

9. Additional Field Work

This is a good basic survey, and no additional field work is recommended.

Examined and Approved:

Chief
Marine Surveys Division

Associate Director
Office of Marine Surveys
and Maps

H-8467

Information for Future Presurvey Reviews

Least depth determinations on the following shoals would be desirable at some opportune time in the future:

Sounding (Fms)	Latitude	Longitude
2.4	55°25.58'	132°24.37'
1	55°25.78'	132°24.66'
3.2	55°24.48'	132°24.01'
1.9	55°26.17'	132°20.8'

The passage between East Sentinel Island and Thumb Point should be closely developed to ascertain the controlling depth and any dangers that may exist in this area.

Position Index		Bottom Change	Use	Resurvey
Lat.	Long.	Index	Index	Cycle (years)
552	1323	2	1	50
552	1322	2	1	50

632

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
SHIP PATHFINDER
705 FEDERAL OFFICE BUILDING
SEATTLE 4, WASHINGTON

PATH/MTP/keh (1958)
File No. 22
Serial No. 709.1
7 August 1958

1958 AUG 12 PM 12:49

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

Subject: Chart Correction - Kasaan Bay, Alaska
Project CS - 405

Submitted under separate cover is a tracing of the hydrographic survey in Smith Cove, Kasaan Bay. This sketch is submitted for advance information for chart corrections.

It is recommended that an overlay sheet be prepared for correction of chart 8142 and submitted with a Notice to Mariners.

Your attention is invited to the particular dangers listed below:

1. ½ fm.	Long. 55° 26.04'	Lat. 132° 19.97'
2. ½ fm.	Long. 55° 26.17'	Lat. 132° 20.37'
3. ½ fm.	Long. 55° 26.20'	Lat. 132° 20.36'
4. ½ fm.	Long. 55° 26.33'	Lat. 132° 20.27'
5. Rock	Long. 55° 26.34'	Lat. 132° 19.74'
6. 2 fm.	Long. 55° 26.30'	Lat. 132° 20.33'
7. 3 fm.	Long. 55° 26.44'	Lat. 132° 20.27'
8. 3 fm.	Long. 55° 26.26'	Lat. 132° 21.26'
9. 3 fm.	Long. 55° 26.23'	Lat. 132° 21.27'
10. 4 fm.	Long. 55° 26.23'	Lat. 132° 20.87'
11. 4 fm.	Long. 55° 26.26'	Lat. 132° 20.38'

#10 disagrees with H-8467 (probably control)

H-1649 "b" (1885)

This tracing is titled as reconnaissance because it was plotted directly on the T sheet, and not on the boat sheet. The survey was otherwise made in accordance with standard practices and can be smooth plotted for record at a later date.

It is noteworthy to mention that ½ fathom soundings listed as numbers 3 and 4 above were on survey sheet H-16496 with a rock symbol, but the chart 8142 does not show these rocks.

F. B. Quinn
F. B. Quinn
Captain USC&GS
Commanding Ship PATHFINDER

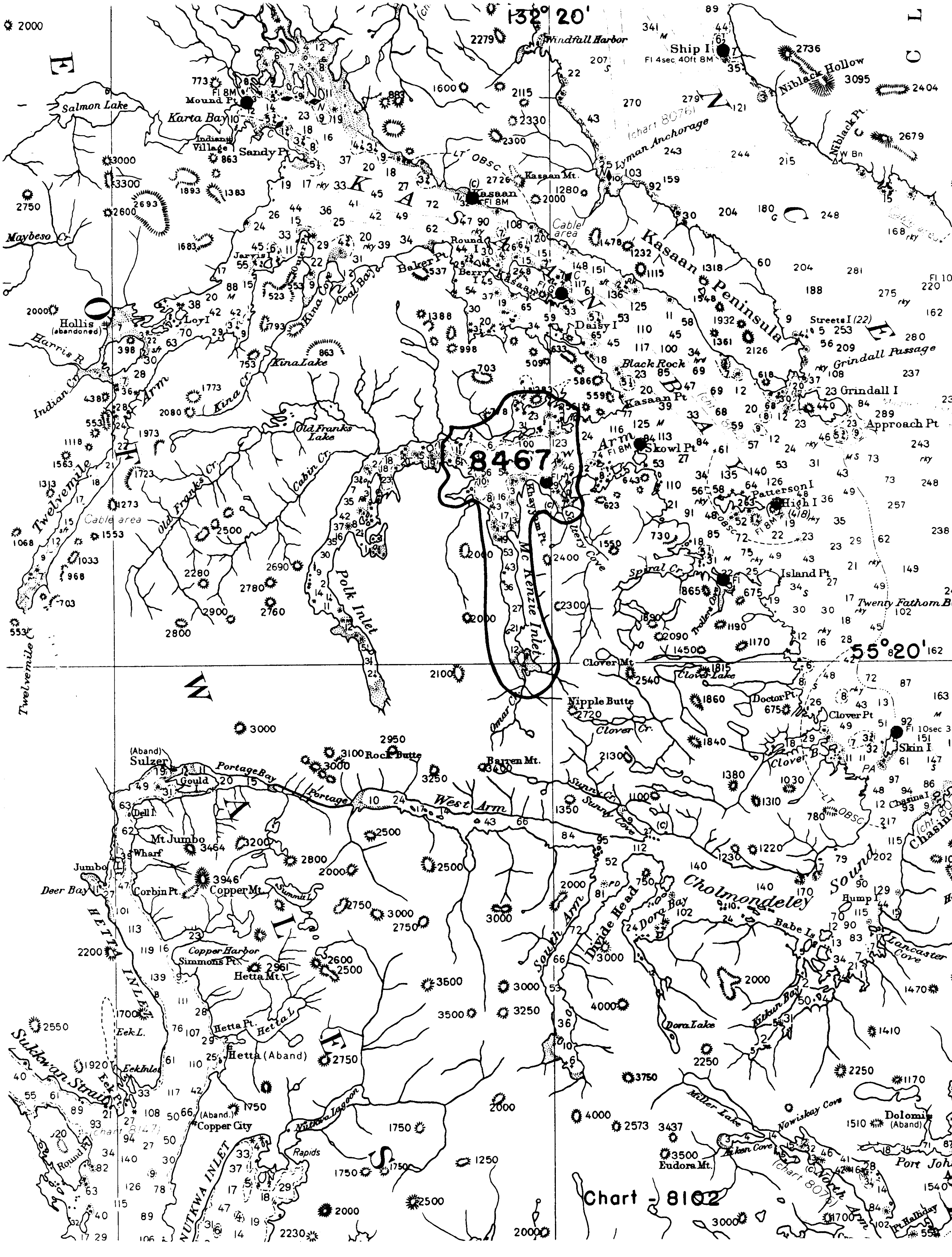
8/13/58
Receipt of tracing and above ltr.
(Signed) Max G. Ricketts
Max G. Ricketts, Chief, Naut.Cht.Br.
Chart Division, C&GS

Bp. 56911 — Hon to M. 35 & chartlet N.M. 38 1958
Chart 8102 - off 10-8-58 REE then cht 8142 chatlet
8142 a.g.H. 7-21-59

632
AUG 12 1958

→ 56911 is lost. No microfilm of it.

Poor Copy


132° 20'
55° 20'
8467
Chart - 8102
Windfall Harbor
Ship I
Niblack Hollow
Niblack Pt
Salmon Lake
Mound Pt
Karta Bay
Indian Village
Sandy Pt
Lyman Anchorage
Kasaan
Kasaan Mt.
Maybeso Cr.
Cable area
Kasaan Peninsula
Jarvis I
Round I
Berry I
Baker Pt
Coal Bay
Kina Cove
Hollis (abandoned)
Harris R.
Loy I
Daisy I
Streets I
Grindall Passage
Kina Lake
Kina Cr.
Indian Cr.
Black Rock
Grindall I
Kasaan Pt
Approach Pt
Old Franks Lake
Skowl Pt
Twelvemile
Old Franks Cr.
Cabin Cr.
Patterson I
High I
Polk Inlet
Mc Kenzie Inlet
Skowl Arm
Spiral Cr.
Island Pt
Twenty Fathom Bk
Clover Mt.
Clover Lake
Nipple Butte
Doctor Pt
Clover Pt
Omar Cr.
Clover Cr.
Clover B.
Skin I
Sulzer (Aband)
Portage Bay
Gould
Rock Butte
Barren Mt.
Portage
West Arm
Sunny Cr.
Sunny Cove
Chasina I
Dell I.
Mt Jumbo
Wharf
Jumbo
Deer Bay
Corbin Pt.
Copper Mt.
Summit L.
South Arm
Divide Head
Dora Bay
Cholmondeley Sound
Hump I
Babe Is
Lancaster Cove
Hetta Inlet
Copper Harbor
Simmons Pt.
Hetta Mt.
Eek L.
Hetta Pt.
Hetta L.
Hetta (Aband)
Dora Lake
Kitkun Bay
Sukkwan Strait
Eek Inlet
Eek Pt.
Copper City (Aband.)
Nutkwa Lagoon
Rapids
Nutkwa Inlet
Miller Lake
Nowiskay Cove
Dolomi (Aband)
Port Johnson
Round Pt
Eudora Mt.
Aiken Cove
North Arm
Pt Halliday
Chart 8147
Chart 8076

NAUTICAL CHARTS BRANCH

SURVEY NO. H-8467

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
3/24/60	8142	E. E. Thomas	Part applied Before ~~After~~ Verification and Review
1/11/61	8102	E E Thomas	Part applied Before ~~After~~ Verification and Review not thru large scale cht 8142.
13 Mar 61	8002	[illegible]	Before ~~After~~ Verification and Review No hydro at this scale consider as comp. appd
3/6/67	8083	John P. Weis	Before ~~After~~ ~~Verification and~~ Review Part. Applied
1/26/71	8002	Charles S. Forbes	~~Before~~ After Verification and Review No hydro at this scale consider as fully applied
3-9-71	8102	Eric Frey	Before ~~After~~ Verification and Review no corrections at this time
8083	12/20/71	J. Graham	~~Before~~ After Verification and Review #3 App'd misc corr. after review before Insp
10/25/72	8142	J. Graham	Before After Verification and Review #11 app'd misc. corr. thru cht. 8083 dwg. #3
6/2/73	8102	E. FREY	~~Before~~ After Verification and Review Revised several sdgs via cht 8142 dwg #11
			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.