8532

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-10-2-60 *Office No.* H-8532

LOCALITY

State Southeast Alaska

General locality Kasaan Bay

Locality Twelvemile Arm (North)

1960

CHIEF OF PARTY

M. E. Wennermark

LIBRARY & ARCHIVES

DATE March 14, 1962

USCOMM-DC 5087

8532

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-8532

Field No. PF-10-2-60

State Southeast ALASKA

General locality ~~Southeast Alaska~~ Kasaan Bay

Locality Twelvemile Arm (North)

Scale 1:10,000 Date of survey 3 - 25 May 1960

Instructions dated 27 November 1960; Suppl. 6 January 1960

Vessel USC&GS Ship PATHFINDER Launches 1, 2 and 3

Chief of party M. E. Wennermark, CAPT., C&GS - Comdg.

Surveyed by R. M. Sundean, C. A. Burroughs, W. D. Barbee

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

Fathograms scaled by Ship Personnel

Fathograms checked by Ship Personnel

Protracted by Seattle Processing Office - C. R. Lehman

Soundings penciled by Seattle Processing Office - C. R. Lehman

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

REMARKS:

CONTROL: Visual

Survey smooth plotted by Seattle Processing Office

U. S. GOVERNMENT PRINTING OFFICE 777032

DESCRIPTIVE REPORT TO ACCOMPANY

HYDROGRAPHIC SURVEY H-8532 (FIELD NO. PF-10-2-60)

PROJECT CS-405 - KASAAN BAY, ALASKA

SCALE: 1:10,000 MAY 1960

USC&GS SHIP PATHFINDER M. E. WENNERMARK, CDR.

A. PROJECT:-

This survey is part of Project CS-405. Hydrography was done in accordance with Instructions dated 27 November 1957, and Supplemental Instructions dated 6 January 1960.

B. SURVEY LIMITS AND DATES:-

This survey covers an area of Twelve Mile Arm north of hydrographic stations WOO and ZIG. The limits of the sheet are:

Latitude 55° 32' N	Latitude 55° 32' N
Longitude 131½° 28' W	Longitude 132° 42.5 W
Latitude 55° 27' N	Latitude 55° 27' N
Longitude 131½° 28' W	Longitude 132° 42.5 W

Field work began on 3 May 1960 and concluded on 25 May 1960.

This survey junctions with contemporary survey H-8531 (PF-10-1-60; 1960), H-8533 (PF-10-3-60; 1:10,000; 1960) and wire drag survey H-4440,(a & b) 1924, 1:10,000; wire drag survey H-4441, 1924, 1:10,000; wire drag survey H-8102, 1924, 1:5,000.

C. VESSEL AND EQUIPMENT:-

Hydrography was done by Ship PATHFINDER launches nos. 1, 2 & 3 using 808 fathometers. Launch no. 1 used fathometer no. 57-29, launch no. 2, fathometer no. 57-22, launch no. 3, fathometer no. 57-23. Launch no. 4 operated for one day using the hand sounding machine ~~for bottom samples~~ to locate subm. rocks. All launches operated from the ship. A total of 32 bottom samples were taken throughout the area by the ship and her launches.

D. TIDE AND CURRENT STATIONS:-

Tide data was obtained from a portable tide gage installed at latitude 55° 29' N and longitude 132° 38.4W near Hollis Anchorage.

No time or range corrections were applied to the tide reducers. Data from this gage was used for the reduction of all soundings on the boat sheet.

No current stations were required.

E. SMOOTH SHEET:-

The smooth sheet projection was constructed aboard ship. All control has been plotted and verified.

F. CONTROL STATIONS:-

Triangulation within the sheet limits was established by F.B.T. Siems in 1924 and by M. E. Wennermark in 1960. All triangulation station marks were searched for and Recovery Notes submitted. Triangulation and Topographic Stations listed below were located by standard methods:

PF-B-60, PF-C-60, PF-D-60, PF-E-60 (Graphic Control sheets)

QUO	BOX	LIS,1924	FAR
ZIZ	ABE	DIF	PAD
EAR	OAK	MOTH,1924	MEL
CUT	NAT	EAT	LAX
GNAT, 1924	JAY,1924	DOG	SAF
YES	KID	DOT	LOW
ACT	JAP	BAT,1924	*KEO (KEA on S.S. "KED" on B.S. and in volumes)
IVY	GAL	FLEA,1924	ICE
HER	EGG	ALPHA,1953	KAPPA,1953
FAT	BEE,1924	DELTA,1953	GAMMA,1953
OUT,1924	ADD	ROC	YET
BIG	ERG	PLY	RIM
COP	FOE	POI	OWL
DUD	GIB	TAN	PUT
HIS	KEN	DOL	* RE-INKED AS "Ked" by Reviewer
IRK	LIP	MAG	
JIM	MET	HAG	
NIG	RAT	FUN	
OPI	TAX	GAD	
PAR	SIP	HOL,1924	
VIM	YAM	WOO	
BIB	ZAG	VEX	
WAR	AZO	RAG	
DIP	BUG,1924	CUR	
CAT	ALP	BAG	
BOB	TIK,1924	ACE	
ZOO	VAL	FOX	
YAK	BUM	SIGMA,1953	
WED	HOP	TRE	
TUB	BIG	LAG	
USE	CRY	HOO	

✓

G. SHORELINE AND TOPOGRAPHY:-

Shoreline was transferred to the boat sheet from blue line tracings of Manuscripts T-10689, T-10690, T-10691, T-10695, T-10696, T-10697, T-11503. ✓

Delineation of the low water line was not made in some places because of the steepness of the beach area, or because of rock outcrops. ✓

H. SOUNDINGS:-

Depths are in fathoms with 808 type fathometers calibrated for 800 fathoms per second. Initial settings were maintained at 0.0 fathoms and correction have been entered in the sounding volume where the settings varied. RPM checks were made daily and the reed tachometers were closely watched to insure operation at the proper calibration speed. A standard template was used to check the length of stylus arms. Paper travel tests were run to verify the calibrations. Echo corrections based on a 2.0 fathom bar check were taken and corrections entered in the sounding volumes. Velocity corrections were computed based on four oceanographic stations observed in Kasaan Bay.

I. CONTROL OF HYDROGRAPHY:-

Hydrography was controlled by three point sextant fixes from signals located by triangulation or graphic control.

J. ADEQUACY OF SURVEY:-

No hydrography has been plotted on the smooth sheet, however, no holidays exist in boat sheet work. The survey is assumed to be adequate. See addendum from Processing Office.

K. CROSSLINES:-

Approximately 10% crosslines were run. The soundings at crossings on boat sheet plot are satisfactory. See addendum from Processing Office.

L. COMPARISON WITH PRIOR SURVEYS:-

See addendum from Processing Office.

M. COMPARISON WITH CHART:-

Comparison should be made with Chart 8142 dated 12/3/56. See addendum from Processing Office.

N. DANGERS AND SHOALS:-

All dangers and shoals are recorded in the sounding volumes and will be evident on the Smooth Sheet. See addendum from Processing Office.

P. AIDS TO NAVIGATION:-

No aids exist within the limits of this sheet.

Q. LANDMARKS FOR CHARTING:-

No additional landmarks are recommended. See Special Geographic NAMES Report, See Special Photogrammetry Report.

R. GEOGRAPHIC NAMES:-

See Special Report, Geographic Names, Kasaan Bay, 1960 Season.

S. SILTED AREAS:-

No special study was made, however, fathograms for Ship PATHFINDER Oceanographic work in an area east of ANT,1924 and north of OUT,1924, shows some layering of silt. ΔANT,1924, is on H-8533

T. BY-PRODUCT INFORMATION:-

In conversation with local people it was learned that logging operations at Hollis Anchorage will cease in approximately two years. At such time as they do, mining operations in that area, in addition to the Kina Cove, Coal Bay areas will begin.

Z. TABULATION OF APPLICABLE DATA:-

1. Tide Note
2. Fathometer Abstract & Report
3. Velocity Abstract
4. Geographic Names Report
5. Photogrammetric Report

Respectfully submitted,

Charles B. Ellis

Charles B. Ellis, CQS, C&GS
USC&GS Ship PATHFINDER

TIDE NOTE

HYDROGRAPHIC SURVEY H-8532

PROJECT CS-405 (PF-10-2-60)

Tides from a portable gage at latitude 55° 28.8 N, longitude 132° 38.4 W, near Hollis Anchorage were used for the reduction of all soundings within the limits of this survey. The height on the tide staff corresponding to MLLW was 17.91 feet below BM No. 4. No time or range corrections were used. Hourly heights were scaled from the marigrams by Ship personnel.

TABULATION - VELOCITY CORRECTIONS
KASAAN BAY, SOUTHEAST ALASKA
PROJECT CS-405

H-8531	PF-10-1-60
H-8532	PF-10-2-60
H-8533	PF-10-3-60

CORRECTION	DEPTH
0.0	to 11.5 fms
+0.1	11.6 to 52.3 fms
+0.2	52.4 to 96.0 fms

PATHOMETER CORRECTIONS
CS-405
KASAAN BAY 1960

LAUNCH	A	B
1 (57-29)	+0.2	-0.5
2 (57-22)	+0.1	-0.9
3 (57-23)	+0.2	-1.0
4 (74-8)	+0.3	-0.6

APPROVAL SHEET
TO ACCOMPANY HYDROGRAPHIC SURVEY
H-8532 (PF-10-2-60)

The field work for this survey was completed under the direction of Captain M. E. Wennermark. The records are complete and boat sheet data indicates the survey is adequate to supersede prior surveys.

Arthur L. Wardwell,
Captain, C&GS
Comdg., Ship PATHFINDER

PROCESSING NOTES H-8532

E. SMOOTH SHEET

The smooth sheet was constructed and triangulation plotted and checked by Ship PATHFINDER personnel. The Topo. and Hydro. signals were also transferred and plotted by them but checked in the Processing Office. ✓

H. CROSSLINES

A number of the crossings on this survey were not in agreement because of faulty scanning of the fathograms. In a number of instances the person who did the rescanning introduced errors of his own. It is believed that most, if not all, of these have been found and corrected. ✓

I. JUNCTIONS

The junctions with H-8531 and H-8533 (unverified 3-17-'67) have been compared and found in agreement. Junction with H-8769 is good. ✓

J. COMPARISON [Also compared with H-8102 WD (1953)]

This survey has been compared with H-4440a (1924) and H-4441 (1924). ✓

The agreement with H-4440a was reasonable except that due to the sparsity of soundings on H-4440a a number of shoal soundings were missed. There is a rather extensive shoal at approximately Lat. 55°31'.3, Long. 132°33'.3, which shows 10.6 fathoms as the least depth found on H-8532. See copy of H-4440a which accompanies the smooth sheet for purple pencil notations. ✓ (Did not get to me. S. Rose)

The comparison with H-4441 is generally good except that there appears to be some shoaling in the hole at Lat. 55°28'.8, Long. 132°39'.3. The deepest depth found on the present survey reduces to 19 fathoms. There is a 21 fathom sounding at Lat. 55°28'.78, Long. 132°39'.13 which apparently is 10 fathoms too deep. H-8532 has nothing deeper than 11 fathoms in this area. Two shoal soundings on H-4441 were not verified on H-8532. Two fathom shoal 250 Meters East of Cat Island carried forward onto H-8532. ✓

K. COMPARISON WITH CHART

This survey was compared with Chart 8142 3rd Ed. June 6/60. ✓

See section of Chart attached to this report for comparison.

Reviewer's comparison with Chart 8142, 5th Ed., Jan. 10, 1966

L. ADEQUACY OF SURVEY

This survey appears complete and adequate for charting. However numerous soundings were found in error in the review of the sheet. The rescanning apparently was not carefully done by the field party. It is possible that there are still some that need correcting. ✓

N. STATISTICS

The work on this survey was accomplished by the Ship PATHFINDER and Launches 1, 2 and 3. ✓

N. STATISTICS Cont'd

Launch No. 1	211 positions,	18 bottom samples,	16.0 naut. miles
" " 2	673 "	0 " "	76.7 " "
" " 3	1678 "	14 " "	212.1 " "
Ship PATHFINDER	4 "	4 " "	0.0 " "
Totals	2566 positions	36 bottom samples	304.8 naut. miles

36
2602

Square nautical miles covered - 10.5

Respectfully submitted

William M. Martin

WILLIAM M. MARTIN
SUPERVISORY CARTOGRAPHER

APPROVED AND FORWARDED

M. E. Wennermark

M. E. WENNERMARK
CAPTAIN, C&GS
SEATTLE DISTRICT OFFICER

LIST OF SIGNALS ON H-8532

ABE	PF-C-60
ACE	PF-C-60
ACT	PF-C-60
ADD	PF-E-60
ALP	PF-C-60
ALPHA	1953
AZO	PF-E-60
BAG	PF-C-60
BAT	1924
BEE	1924
BIB	PF-E-60
BIG	PF-E-60
BIG	Hydro
BOB	PF-D-60
BOX	PF-C-60
BUG	1924
BUM	Hydro
CAT	PF-D-60
COP	PF-E-60
CRY	PF-C-60
CUR	PF-C-60
CUT	PF-C-60
DELTA	1953
DIF	PF-C-60
DIP	PF-D-60
DOG	PF-C-60
DOL	PF-C-60
DOT	PF-C-60
DUD	PF-E-60
EAR	PF-C-60
EAT	PF-C-60
EGG	PF-D-60
ERG	PF-E-60
FAR	PF-C-60
FAT	PF-D-60
FLEA	1924
FOR	PF-E-60
FOX	PF-C-60
FUN	PF-C-60
GAD	PF-C-60
GAL	PF-D-60
GAMMA	1953
GIG	PF-E-60
GNAT	1924
HAG	PF-L-60
HER	PF-D-60
HIS	PF-E-60
HOL	1924
HOD	PF-C-60
HOP	Hydro
ICE	PF-C-60
IRK	Hydro
IVY	PF-D-60
JAP	PF-D-60
JAY	1924
JIM	PF-E-60
KAPPA	1953
KED	PF-C-60
KEN	PF-E-60
KID	PF-D-60
LAG	PF-C-60
LAX	PF-6-60
LIP	PF-E-60
LIS	1924
LOW	PF-C-60
MAG	PF-C-60
MEL	PF-C-60
MET	PF-E-60
MOTH	1924
NAT	PF-C-60
NIG	PF-E-60
OAK	PF-C-60
OBI	PF-E-60
OUT	1924
OWL	PF-B-60
PAD	PF-C-60
PAR	PF-E-60
PLY	PF-C-60
POI	PF-C-60
RAG	PF-C-60
RAT	PF-E-60
RIM	PF-B-60
ROC	PF-C-60
SAF	PF-C-60
SIGMA	1953
SIP	PF-E-60
TAN	PF-C-60
TIK	1924
TRE	PF-C-60
TUB	PF-C-60
USE	PF-C-60
VAL	PF-C-60
VEX	PF-B-60
VIM	PF-E-60
WAR	PF-E-60
WED	PF-C-60
WOO	PF-B-60
YAK	PF-C-60
YAM	PF-E-60
YES	PF-C-60
YET	PF-B-60
ZAG	PF-E-60
ZIG	PF-B-60
ZOO	PF-C-60

RHC

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

TIDE NOTE FOR HYDROGRAPHIC SHEET

~~Division of Coastal Surveys~~ March 28, 1962

Division of Charts: R. H. Carstens

Plane of reference approved in
12 volumes of sounding records for

HYDROGRAPHIC SHEET 8532

Locality Twelve Mile Arm, Southeast Alaska

Chief of Party: M. E. Wennermark (1960)
Plane of reference is mean lower low water, reading
1.9 ft. on tide staff at Hollis Anchorage
17.9 ft. below B. M. No. 4 (1953)

Height of mean high water above plane of reference is: 14.9 feet.

Condition of records satisfactory except as noted below:

J. M. Symons
Chief, Tides and Currents Branch

~~Chief, Division of Tides and Currents~~

U. S. GOVERNMENT PRINTING OFFICE 877933

Form 946

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. 8532

Records accompanying survey: Smooth sheets 1;

boat sheets 2; sounding vols. 12; wire drag vols. ;

Descriptive Reports 1; graphic recorder envelopes 7;

special reports, etc. 4-Film Positives of Graphic Control Sheets.

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

		verification	review
Number of positions on sheet		2602	
Number of positions checked		Approx. 10%	43
Number of positions revised		2	0
Number of soundings revised (refers to depth only)		3	0
Number of soundings erroneously spaced		4	0
Number of signals erroneously plotted or transferred		0	0
Topographic details	Time	32	11 hrs.
Junctions	Time	24	8 hrs.
Verification of soundings from graphic record	Time	8	3 hrs.
Special adjustments (Volumes & Pathograms needed careful review)	Time	24	0

Verification by Jorge Rozemczak Total time 576 Date Feb 18-66

Reviewed by S. Rose Time 173 hrs. Date April 12, '67

Cursory Insp. H. Myers 43 hrs 4/28/76

Curtesy 5 to 6/8/76

US COMM C&GS DC

FORM 197
(3-16-55)

GEOGRAPHIC NAMES

Survey No. H-8532

Name on Survey	A: On Chart No. 8142	B: On previous survey No.	C: On U. S. quadrangle Maps	D: From local information SR 252	E: On local Maps	F: P. O. Guide or Map	G: Rand McNally Atlas	H: U. S. Light List	K: BGN	
Althouse Point	x									1
Cat Island	x									2
Clark Bay	x									3
Coal Bay	x									4
Forty Pound Point				x						5
Harfis River Bay	x									6
Hollis Anchorage	x									7
Hollis(abandoned)	x									8
Jarvis Island	x									9
Kajusgidnas Point				x						10
Kasaan Bay	x								x	11
Kina Bay	x									12
Loy Island	x									13
Maybeso Creek	x									14
Nanny Bay				x						15
Outer Point	x									16
Pellett Point				x						17
Prince of Wales I.	x									18
Twelvemile Arm	x									19
Twelvemile Bay				x						20
										21
										22
										23
										24
										25
										26
										27

George M. Lee
Geographic Names Section
6 April 1962

H-8532

Information for Future Presurvey Reviews

There are no significant differences between present and prior depths in the common area of the survey.

Position Index Lat.	Long.	Bottom Change Index	Use Index	Resurvey Cycle
552	1323	2	1	50 years
552	1324	2	1	50 years
552	1325	2	1	50 years
553	1323	2	1	50 years
553	1324	2	1	50 years
553	1325	2	1	50 years

OFFICE OF MARINE SURVEYS AND MAPS

MARINE SURVEYS DIVISION

HYDROGRAPHIC SURVEY REVIEW

REGISTRY NO. H-8532 FIELD NO. PF-10-2-60

Southeast Alaska, Kasaan Bay, Twelvemile Arm (North)

SURVEYED: May 3-25, 1960

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

SOUNDINGS: 808 Depth Recorders
Sounding Machine CONTROL: Sextant Fixes
on Shore Signals

Chief of Party	M. E. Wennermark
Surveyed by	R. M. Sundean
	C. A. Burroughs
	W. D. Barbee
Protracted by	C. R. Lehman
Soundings Plotted by	C. R. Lehman
Verified and Inked by	G. Kozemczak
Reviewed by	S. Rose
	Date: April 12, 1967
Cursory inspection made--survey processing considered complete	G. K. Myers April 28, 1976

1. Description of the Area

This survey covers the northern part of Twelvemile Arm which extends from Cat Island to Coal Bay located at the entrance to Kasaan Bay. The bottom is characterized by steep rugged slopes which extend to depths of greater than 40 fathoms.

Many rocky shoals and reefs exist on the present survey.

Predominant bottom characteristics in the area are mud, pebbles, and shell. Rocky ledges intersperse gravel and boulder strewn beaches along the shore.

2. Control and Shoreline

The source of control is adequately described in section F of the Descriptive Report.

The shoreline originates with advance photogrammetric manuscripts T-10689 (1956), T-10690 (1956-60), T-10691 (1956-53), T-10695 (1956-60), T-10696 (1956-60), T-10697 (1956-60), and T-11503 (1954-63).

3. Hydrography

A. Depths at crossings are in good agreement considering the irregularity of the bottom.

B. The usual depth curves are adequately delineated.

C. Lesser depths were carried forward from prior surveys to supplement present hydrography in areas of offlying shoals. With the addition of these soundings, the development of the bottom configuration and investigation of least depths are considered adequate.

4. Condition of the Survey

A. The field work conformed to the requirements of the Hydrographic Manual except that closer development and hand lead verification of several shoal depths would have been desirable. In many instances, soundings were carried forward from prior surveys to supplement present hydrography.

B. The Descriptive Report is complete and comprehensive.

C. The sounding records were complete except for the following:

(1) The recorder inserted MRV (middle reed vibrating) indiscriminately throughout the sounding volumes. This statement should be made when an actual check is made.

(2) Clock time was erroneously recorded in a sounding volume. Time should be recorded by numbering the hours consecutively from 0 (midnight) to 23 (11 p.m.).

(3) The numbering of positions recorded in some volumes and fathograms was uncertain.

D. The smooth plotting was accurately done.

5. Junctions

Adequate junctions were effected with H-8531 (1960) on the south, and H-8769 (1963) on the east. The junction with H-8533 (1960) on the north will be made during the review of that survey.

6. Comparison with Prior Surveys

A.	H-1652a	(1885)	1:40,000
	H-4440a	(1924)	1:20,000
	H-4441	(1924)	1:10,000

These three surveys comprise the prior coverage of the present survey area. A comparison with the present survey reveals no noteworthy differences between prior and present depths and indicates a relatively stable bottom.

The pile charted at latitude 55°29.29', longitude 132°39.27' from H-4441 (1924) and used as topographic signal "PILE" on that survey was not identified on the present survey. This feature probably deteriorated during the period of 36 years and is considered gone. The pile should be deleted from the chart.

Some least depths and a sunken rock in areas of shoals have been brought forward to the present survey. With these additions, the present survey is adequate to supersede the prior surveys in the common area.

B.	H-4440b W.D.	(1924)	1:20,000
	H-4441 W.D.	(1924)	1:10,000
	H-8102 W.D.	(1953)	1:5,000

Depths on the present survey do not conflict with the effective depths shown on these wire-drag surveys. Several soundings have been carried forward from these surveys to supplement the present survey.

7. Comparison with Chart 8142 (latest print date January 10, 1966)

A. Hydrography

The charted hydrography originates with the previously discussed prior surveys which require no further consideration supplemented by a partial application of depths from the boat sheet and unverified smooth sheet of the present survey and other sources.

Attention is directed to the following:

(1) The log boom piling located in the immediate vicinity of latitude 55°29', longitude 132°39' on the present survey were subsequently removed and deleted from the chart. Source is Chart Letter No. 1120 of 1964.

(2) The log boom piling charted in the immediate vicinity of latitude 55°28.85', longitude 132°39.65' originates with Corps of Engineers information of 1955 (CL-854/55). This piling was not verified or disproved on the present survey and should be retained on the chart.

(3) The dolphins charted in the immediate vicinity of latitude 55°29.1', longitude 132°39.95' originate with an unknown source. These features appear on the latest chart. The dolphins were not located on the present survey and should be retained on the chart.

(4) The piling charted in the immediate vicinity of Coal Bay originates with Corps of Engineers information of 1955 (CL-854/55). The piles alongshore were not verified on the present survey and should be retained on the chart.

(5) The 1 1/2-fathom sounding charted at latitude 55°28.83', longitude 132°39.57' was shown in error on the penciled smooth plot of the present survey and should be deleted from the chart.

Except as indicated in items (1) through (4) above, the present survey is adequate to supersede the charted information in the common area.

B. Aids to Navigation

A daybeacon at latitude 55°28.83', longitude 132°39.16' was charted subsequent to the present survey. Source is Chart Letter No. 1120 of 1964. This aid to navigation marks the feature intended.

8. Compliance with Instructions

The survey adequately complies with the Project Instructions.

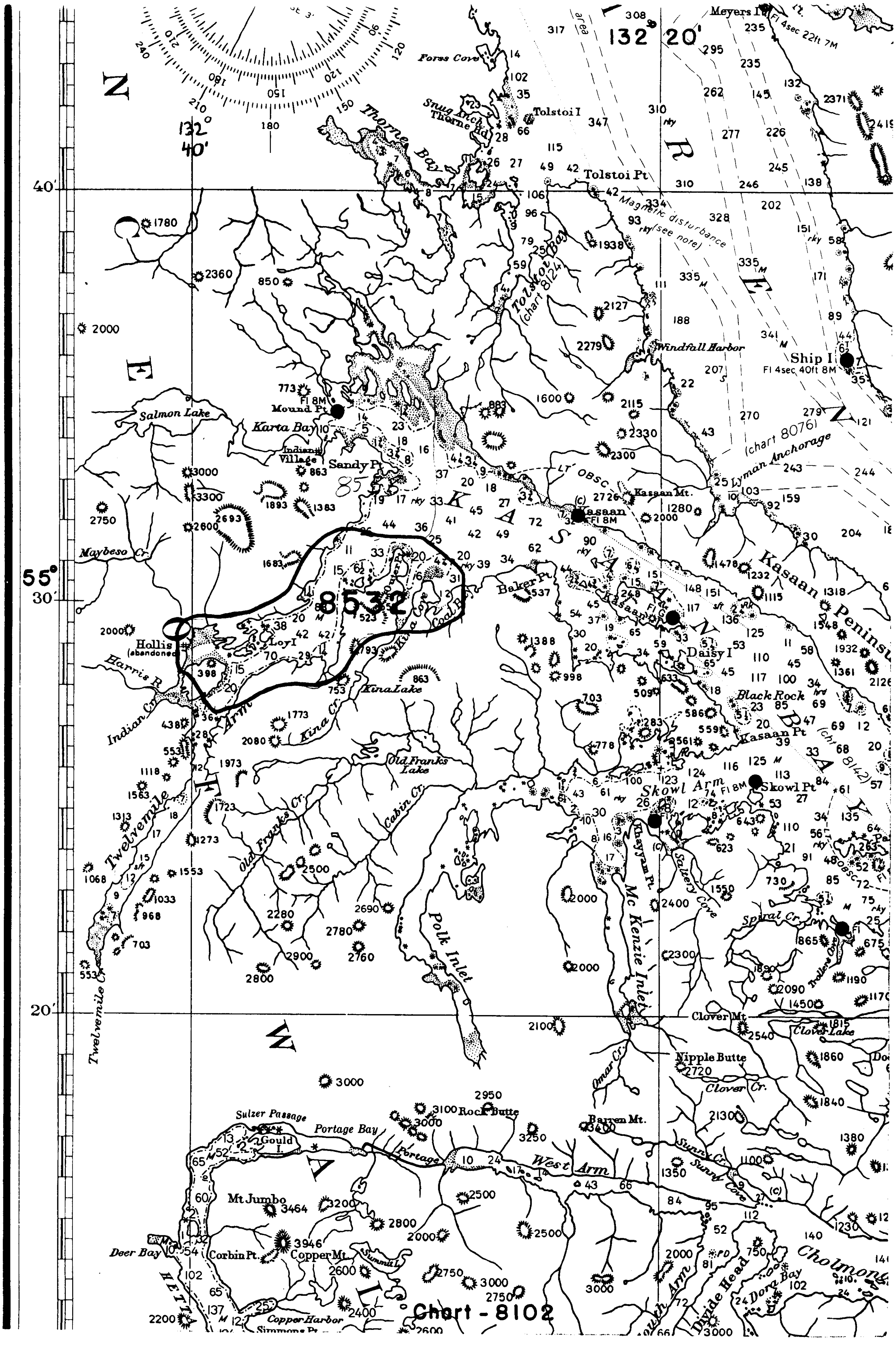
9. Additional Field Work

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

Examined and Approved:

a. j. Patil
Chief
Marine Surveys Division

R. K. Houston
Associate Director
Office of Marine Surveys
and Maps



132° 20'
132° 40'
40'
55° 30'
20'
Meyers I
Fl 4sec 22ft 7M
Forss Cove
Snug Anch
Thorne Hd
Thorne Bay
Tolstoi I
Tolstoi Pt
Tolstoi Bay (chart 8124)
Magnetic disturbance (see note)
Windfall Harbor
Ship I
Fl 4sec 40ft 8M
Salmon Lake
Mound Pt
Fl 8M
Karta Bay
Indian Village
Sandy Pt
(chart 8076)
Lyman Anchorage
Kasaan Mt.
Kasaan
Kasaan Peninsula
Maybeso Cr.
Baker Pt
8532
Loy I
Coal B
Kina Cove
Hollis (abandoned)
Harris R
Indian Cr.
Kina Lake
Kina Cr.
Daisy I
Black Rock
Kasaan Pt
(chart 8142)
Old Franks Lake
Old Franks Cr.
Cabin Cr.
Skowl Arm
Skowl Pt
Khayyam Pt.
Saltery Cove
Polk Inlet
Mc Kenzie Inlet
Twelvemile Arm
Twelvemile Cr.
Spiral Cr.
Trollers Cove
Clover Mt
Clover Lake
Nipple Butte
Clover Cr.
Omar Cr.
Rock Butte
Barren Mt.
Sulzer Passage
Portage Bay
Gould I.
Portage
West Arm
Sunny Cr.
Sunny Cove
Mt Jumbo
Copper Mt
Deer Bay
Corbin Pt.
Summit L.
Copper Harbor
Simmons Pt
South Arm
Divide Head
Dora Bay
Cholmondeley
Chart - 8102

NAUTICAL CHARTS BRANCH

SURVEY NO. H-8532

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
4-6-62	8142	M. Rogers	Partially appld Before ~~After~~ Verification and Review
4-16-63	8102	h. j. keeler	Part appd thru chart 8142 drw. 37 Before ~~After~~ Verification and Review,
4-22-62	8002	h. j. keeler	No correction thru chart 8102 Before ~~After~~ Verification and Review
1-26-71	8002	Charles S. Forbes	~~Before~~ After Verification and Review. No hydro at this scale. consider Fully applied.
4-21-71	8102	E. Frey	Part appd ~~Before~~ After ~~Before~~ ~~After~~ Verification and Review before No further corrections at this time
10-9-74	8142	M. D. KANIS	Part Appd ~~Before~~ After Verification and Review before inspection (Full Application)
			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.