9014

Diag. Cht. No. 8554-2.

NOAA FORM 76-35A

U.S, DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEY

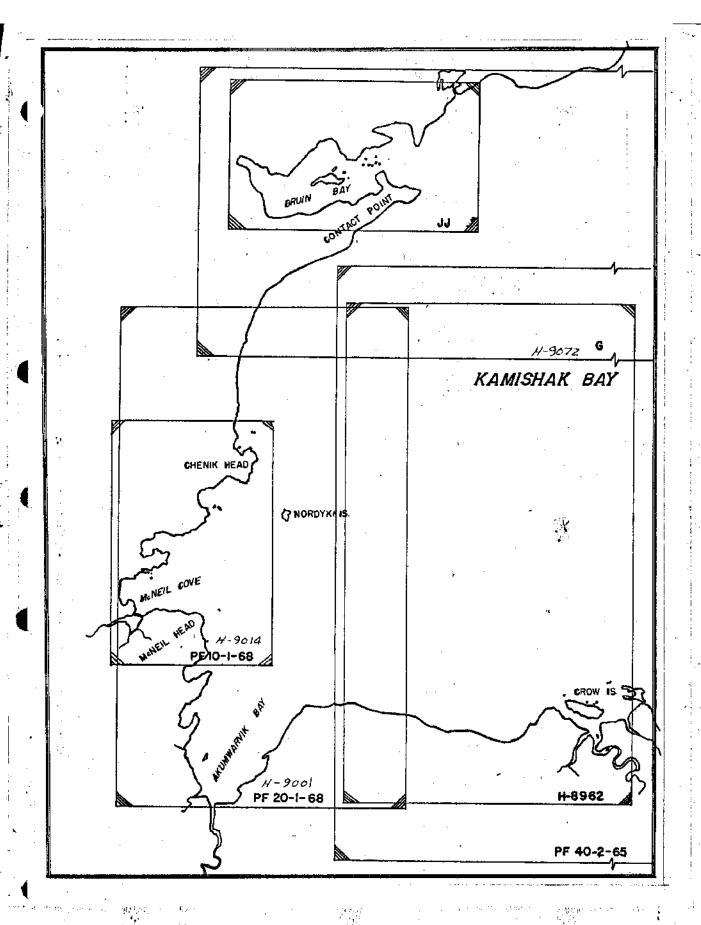
DESCRIPTIVE REPORT

(HYDROGRAPHIC)

(III BROOKA? THE)
Type of Survey Hydrographic Field No. H-9014 Office No. H-9014
LOCALITY
State Alaska
General Locality . Kamishak Bay
Locality McNeil Head to Chenik Head
19 68 CHIEF OF PARTY A. C. Holmes
LIBRARY & ARCHIVES
DATE7-15-74

☆U.S. GOVERNMENT PRINTING OFFICE: 1974-763-098

FORM C&GS-537	U.S. DEPARTMENT OF COMMERCE Environmental science services administration coast and geodetic survey	***************************************
	HYDROGRAPHIC TITLE SHEET	H-9Ø14
	The Hydrographic Sheet should be accompanied by this form, etely as possible, when the sheet is forwarded to the Office.	FIELD NO. PF 1Ø-1-68
		F3 10=1-00
StateGeneral localit	Alaska Kamishak Bay y Gook Inlet	
Locality		
Scale		
Instructions da	ted April 3, 1968 Project No	. OPR-429
Vessel	ML #1, #2, #3 and #4	
-	CDR A. C. Holmes Ship's Personnel	
	n by echo sounder, KNOKKONKKNIE Raytheon DE-72	23 Echo Sounder
	scaled by Ship's Personnel	
	checked by Ship's Personnel Verified Automotive Automotive Personnel	Coch Daideal Distance
•	SANCES Soundings verified by: Felipe L.	
Soundings in	fathoms feet at MCM MLLW	
REMARKS:	This report describes the completed sur	
	May - August, 1968.	
		ELF.
		5554 8502
	and the	8500
-	applied to still 14	308.



A. PROJECT

Supplemental instructions dated April 3, 1968(Ship PATHFINDER) /

B. AREA SURVEYED

The area surveyed on this project begins in extreme western Kamishak Bay, in McNeil Cove, starting from a point one and one-half miles south and east of McNeil Head and extending northward along the coastline to Chenik Head.

The sheet limits are as follows:

North: Latutude 590 13! 30" N

West: The coastline extending from Chenik Head

to McNeil Head.

South: Latitude 59° 06' 00" N East: Longitude 154° 05' 00" W

The hydrography for this survey started on May 27, 1968 and terminated on August 7, 1968.

This survey has a junction with the contemporary survey PF 20-1-68 which was begun this 1968 season. H-9001(1968-70)

C. SOUNDING VESSELS

The motor launches used in this survey were #1, #2, #3, and #4. The colors used to identify the launches are as follows:

ML#1 - blue, ML#2 - violet, ML#3 - green, and ML#4 - brown.

No hydrography was done by the ship for this survey.

D. SOUNDING EQUIPMENT

The echo sounders used by the motor launches were Raytheon DE 723 echo sounders. A minimum of fathometer problems throughout the entire survey resulted in good quality and accuracy in the fathograms.

The following is a list of the echo sounders and serial numbers used for the survey:

Vessel	<u>Serial No.</u>
ML#1	935
ML#2	551
ML#3	1 <u>15</u>
ML#4	552

The echo sounder corrections for draft were obtained by lead line comparisons and bar checks. The bar checks were taken twice daily for all launches.

The fine line checks for all fathometers were considered adequate which resulted in a minimum of error in recording the true depth.

E. SMOOTH SHEET

The smooth sheet is to be plotted at the Pacific Marine Center with a Gerber digital plotter.

F. CONTROL

Raydist was used for controlling approximately 60% of the hydrography. The remainder was controlled by three point visual fixes.

The 1968 Raydist stations were established on stations "CROW, 1964" and "JUMA, 1967". Station "CROW" was established in 1964 and is a second-order traverse station. Station "JUMA" was established in 1967 and is a second-order, class II triangulation station.

The control for the visual hydrography was established by signal building on existing triangulation stations and by standard photogrammetric means. Photo-hydro signals were plotted on Incomplete Manuscript T-13279, T-13280, T-13281, T-13282, and T-13283(1:10,000, May, 1968).

G. SHORELINE

The incomplete manuscripts listed in paragraph F were used for the transfer of shoreline to the boat sheets.

The transfer of shoreline and topographic details has not been verified.

The MHWL was investigated by field edit methods and found to be correct. The compilation of foreshore and offshore features was found to be inaccurate due to the lack of low water photographs of the area. Therefore, a thorough field edit of the area was made to adequately delineate these features. The revised locations of these features are shown on boat sheet "C". Advance manuscripts should be requested for smooth plotting these details.

In several areas, the mean lower low water line was not defined because launch hydrography could not be run across the edges of the ledges and reefs. In these areas, the field edit of the area defines the mean lower low water line and this fact is noted on the boat sheets.

H. CROSSLINES

Crosslines exceeded 8% of the hydrography excluding developments.

The crosslines were generally consistent with the regular system of sounding lines with discrepancies less than three-tenths of a fathom(see Tide Note).

I. JUNCTIONS

The boat sheet junctions on the eastern limit of this sheet with PF 20-1-68 n major discrepancies were found between the soundings on the two adjoining boat sheets.

J. COMPARISON WITH PRIOR SURVEYS

There were no prior hydrographic surveys of this area.

K. COMPARISON WITH THE CHART

The area surveyed was compared with C&GS chart 8554, Cook Inlet - Southern Part, 1:200,000, 10th ed., Nov 27/67, for general shoreline and reef delineation and was found

to be satisfactory for a small scale chart of the area.

As shown on chart 8554, and verified by this survey, the area abounds in reefs, ledges, rocks and shoal waters.

L. ADEQUACY

The survey is considered to be thorough and complete.

M. AIDS TO NAVIGATION

There are no aids to navigation within the survey limits.

N. STATISTICS

			RAYDI	ST		
Vess	<u>el</u>	Positions	Sou	nding Lines	Bottom Samples	
ML#1		1430 (00)	01- (431)	237.5 n.m.	109	
	Total	1430		237.5 n.m.	109 (Pos. 85 0	ı - 8609)
	•		VISUA	<u>.L</u>		
Vess	<u>el</u>	Positions	Sou	inding Lines	Bottom Samples	
ML#2 ML#3 ML#4	_	1106 6	000-4361) 000-7107) 000-2050)	30.6 n.m. 98.8 n.m. 2.8 n.m.	-	
	Total	1517		132.2 n.m.	17 (?os 8610	-8626)
	TOTALS	2947	·	369.7 n.m.	126	

Area of Hydrography:

Tide Stations:

13.7 square miles 1968 Bubbler tide gage on Nordyke I.

Current Stations: Magnetic Stations: Four(316 hours)
Two("Horseshoe" and "Contact")

Oceanographic Stations:

June 10, 1968 Lat 59°11.8'N Long 154°05.8'W June 27, 1968 Lat 59°11.3'N

July 15, 1968 Lat 59°11.0'N
Long 154°06.0'W

July 31, 1968 Lat 59°11.2'N Long 154°06.5'W "CROW, 1964," "JUMA, 1967"

Raydist Stations:

MISCELLANEOUS

All data obtained was straight-forward with no unusual peculiarities in obtaining it. Accuracy of this survey was considered to be excellent. No correctors for Raydist control were necessary.

RECOMMENDATIONS

The survey is considered excellent for charting with no further investigations necessary.

REFERENCES TO REPORTS

None.

Respectfully submitted,

Bruce C. Rinneke Bruce C. Renneke LT(jg) USESSA

PF-1Ø-Ø1-68 (H-9Ø14)

VELOCITY CORRECTIONS

17 May to 19 June, 1968

(Julian Days 138-171 only)

Table #1

Correction	To Depth
Ø.Ø fms +Ø.1 fms	Ø.Ø - 6.1 fms 6.2 -12.Ø fms
22 June to 4 July 1968	(Julian Days 174-186 only)
Table #2	
Correction	To Depth
Ø∙Ø +Ø∙1	Ø.Ø - 3.8 3.9 -1Ø.3

6 July to 14 August 1968

Table #3

Correction	<u>To Depth</u>
Ø.Ø +Ø.1	Ø.Ø - 2.7 2.8 - 7.7
+ؕ2	7.8 -12.Ø

PF-10-1-68

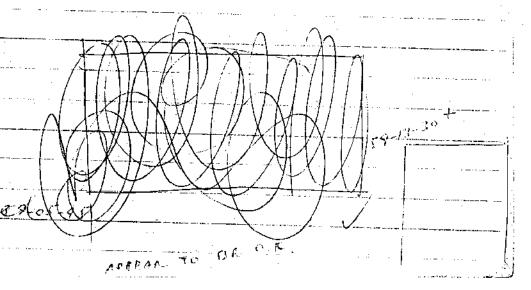
LIST OF SIGNALS

STATION	ORIGIN	LATITUDE	LONGITUDE
STATION 001 002 003 004 005 006 007 008 009 010 011 012 013 014 015	ORIGIN T-13281 T-13281 T-13279	1ATITUDE 59-10-1676 59-10-1838 59-11-0693 59-11-1671 59-11-1646 59-12-0650 59-12-1502 59-12-1783 59-12-1704 59-13-0857 59-12-1004	LONGITUDE 154-09-0244 154-10-0162 154-10-0753 154-09-0873 154-09-0072 154-07-0829 154-07-0325 154-07-0314 154-05-0345 154-08-0256 154-08-0256 154-08-0252 154-06-0943
016 017 018 019 020 021 022 023 024 025 026 027 028	PAINT 1967 T-13281 T-13280 T-13280 T-13280 T-13280 T-13280 T-13280 T-13283 T-13280 T-13280 T-13280 T-13280	59-12-1004 59-09-0912 59-10-0343 59-10-0744 59-10-0218 59-09-1659 59-07-1659 59-07-1135 59-07-1135 59-07-1137 59-07-1137 59-05-1051	154-13-0108 154-11-0195 154-11-0547 154-11-0615 154-12-0638 154-14-0828 154-13-0482 154-12-0930 154-10-0057 154-14-0393 154-13-0164 154-10-0393 154-09-0468 154-09-0877

HYORO PIOTTRA CON

S/32/ P. C.

Same of	<u> </u>	
4.5	H-NO	LATITUDE LONGITUDE X
	9014-	γ γ
10	3 0040 001	68 59105416 154091536 04773 10044
	30048 002	68 59105940 154191919 10044
\	30048 003	68 59105940 154101020 05688 10214
- X-X	30048 004	68 59112239 154104742 06308 10961
4.7	30048 005	68 59113678 154095499 05434 11429
	30048 006	68 59115400 154090454 04593 11988
AND POST	30048 007	68 59114860 154075222 03388 11812
	30048 008	68 59115319 154072684 02965 11962
- 1	30048 009	00 291441U1 154072048 02860 1204E
	30048 010	00 09124804 154070718 02639 13720
1	30048 011	
4 1 2	30048 012	68 59125762 154072124 02873 14065
_	30048 013	68 59125507 154081613 03788 13073
×\$ (7)	30048 014	68 59130142 154082962 04013 14170
	30048 015	68 59132769 154081589 03784 15022
7.5		68 59123245 154065942 02509 13227
	Total Control of the	00 29092947 154130680 08634 07293
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-	30048 020	99 3909083/ [54734014 00100 0ccom
	30048 021	00 270 (2361 154145206 10202 07363
77	30048 022	68 59095946 154133034 09026 08267
)	30048 023	68 59073668 154125846 08497 03628
	30048 024	68 59061228 154100358 05576 00887
	30048 025	68 59094854 1541404358 05576 00887
	30048 026	68 59094854 154142473 09934 07912
	30048 027	68 59101044 154131158 08713 08624
	30048 028	68 59070271 154102470 05929 02525 68 59073674 154093943 05929 02525
0	0000	68 59073674 154092942 05006 03631



APPROVAL SHEET

The field work and edit on this sheet have been examined and approved.

The survey is considered complete and adequate for charting purposes with no additional field work recommended.

A. C. Holmes

A. C. Holmes CDR, USESSA CMDG. Officer

USC&:GSS PATHFINDER

APPROVAL SHEET

The smooth sheet has been inspected, is complete, and meets the requirements of the General Instructions for automated surveys and the Hydrographic Manual. (Note: All exceptions are listed in the Verifier's Report)

Examined and approved,

James S. Green

Supervisory Cartographic Technician

Approved and forwarded,

Walter F. Forster, Cdr., NOAA

Chief, Processing Division

Pacific Marine Center

U. S. DEPAREMENT OF COMMERCE MATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL OCEAN SURVEY

TIDE NOTE FOR HYDROGRAPHIC SHEET

Processing Division: Pacific Marine Center

Hourly heights are approved for tide tape reducer printout.

Tide Station Used (NOAA form 77-12): Nordyke Island, Alaska

Period: May 17 - September 9, 1968

HYDROGRAPHIC SHEET: H-8843, H-8962, H-9001, H-9014

OPR: 429

Locality: Cook Inlet, Kamishak Bay, Alaska

Plane of reference (mean lower low water): 7.6 ft.

Height of Mean High Water above Plane of Reference is 14.3 ft.

Remarks: Tide reducers revised in red and verified for tape

printout (Fathoms)

Tide printout with H-8843

Chief, Tides Branch

Phos a (imminger

UNITED STATES GOVERNMENT

Memorandum

Commanding Officer

USC&GSS PATHFINDER

U.S. DEPA_TMENT OF COMMERCE ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION

COAST AND GEODETIC SURVEY

RECEIVED

DEC 16 1968

DATE: December 11, 1968

SHIP PATHFINDER

In reply refer to:

C3312-284-CSSG

FROM : Chief. Tide

Chief, Tides Section Oceanography Division

Oceanography Divisi

SUBJECT: Nordyke Island tidal data

MLLW on the 1968 staff is 7.7 ft.

The marigrams are being returned under separate cover for hourly height scaling as needed for your hydrographic work. It is customary procedure for ship personnel to tabulate wanted hourly heights before sending the records in to this Section. Only the times and heights of the high and low waters are tabulated here to determine planes and ranges. We then furnish the MLLW plane and infer requested hourly heights that were missing from the record.

In the future please make requests for tidal data by separate memorandum, not on a transmittal letter. These forms are checked only for incoming data and sent to the Archives Branch where they are stamped and returned to the sender. Requests and incidental information are usually not noted.

Marsha a. Winn

Martha A. Winn

TIDE NOTE

A pressure recording (bubbler) tide gage was re-installed on Nordyke Island in May, 1968 for use with OPR-429. The height of MLLW above this tide staff zero was 7.7 feet in 1968. This statement will be verified by Chief of Tides on CCGS form 712. The time meridian used was 135°W.

All reduced, inked soundings on boat sheet PF 10-1-68 "A" were based on Seldovia, Alaska predicted tides (Tide Tables, 1968). The only exception to this occurred on August 7, 1968 (positions 1409-1433) which was based on Nordyke I. predicted tides.

The reduced, inked soundings on boat sheet PF 10-1-68 "B" were based on the following:

Tide Station	Position No.	Day Letter
Predicted Tides,	l;001=4361 <i>(M4.*2)</i>	158 - 160
Seldovia, Alaska	6001=6566 <i>(M2.*3)</i>	160 - 170
Actual Tides,	6567 - 7047 <i>(ML *3)</i>	171-182
Nordyke I., Alaska	2001 - 2050 <i>(ML *4)</i>	178
Predicted Tides, Nordyke I., Alaska	7046-7107 (ML*3)	183

-	GEOGRAPHIC NAMES Survey No. H-9Ø14	/	Chart. Of	The day of	S. May A.	of de last last	Or less host	Conde	MOO NE ROLL	N.S. Jegan	* / /
•	Name on Survey	/ d	B 8	`≈°/oʻ	0	E	of F	o G	H	» / K	
	AKJEMGUIGA COVE										1
	AMAKDEDULIA COVE			<u> </u>							2
	CHENIK (abandoned)						<u></u>	4			3
	CHENIK HEAD					<u> </u>		<u> </u>			4
	KAMISHAK BAY					<u> </u>					5
	McNEIL COVE										6
	Moneil Head	<u> </u>									7
-	Moneil Islet										8
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NOAA FORM 77-27 (9-72) PRESC BY HYDROGRAPHIC MATUAL 20-2, 5-94, 7-13)

HYDROGRAPHIC SURVEY STATISTICS HYDROGRAPHIC SURVEY NO. H-9014

RECORDS ACCOMPANYING SURVEY: To be completed when survey is registered.

RECORD DESCRIPTION			AMOUNT			AMOUNT		
SMOOTH SHEET	& PNO		1		BOATS	HEETS		1-Cloth 3-Mylar
DESCRIPTIVE R	EPORT		1	·	OVERL	AY5		4
DESCRIPTION	DEPTH RECORDS	HORIZ, C		РВІМТ	2TUQ1	TAPE ROLLS	PUNCHED CARDS	ABSTRACTS/ SOURCE DOCUMENTS
ENVELOPES								
CAHIERS	1							
VOLUMES	14							
BOXES				7				

T-SHEET PRINTS (List)

SPECIAL REPORTS (List)

OFFICE PROCESSING ACTIVITIES The following statistics will be submitted with the cartographer's report on the survey

AMOUNTS PROCESSING ACTIVITY PRE-REVIEW TOTALS VERIFICATION VERIFICATION 2947 POSITIONS ON SHEET <u>65</u> POSITIONS CHECKED 2947 52 O POSITIONS REVISED DEPTH SOUNDINGS REVISED or added 79 687 DEPTH SOUNDINGS ERRONEOUSLY SPACED 26 0 SIGNALS ERRONEOUSLY PLOTTED OR TRANSFERRED -ø− 0 TIME (MANHOURS) 8 Verification of Control TUNCTIONS 25 Verification of Positions/ 25Ø 65 564 Verification of Soundings 40 297 Smooth Sheet Compilation ALL OTHER WORK 110 567 1686 TOTALS BEGINNING DATE ENDING DATE PRE-VERIFICATION BY BEGINNING DATE ENDING DATE VERIFICATION BY July 12, 1974 Feb. 1969 Felipe L. Rosario BEGINNING DATE ENDING DATE REVIEW BY Oct 24:1975

1/27/16 16 her

REGISTK. NO. <u>H-9014</u>

The Computer and Excess Sounding Cards for this survey have not been corrected to reflect the changes made to the Computer Card and Excess Card Printouts at this time of the review.

When the cards have been updated to reflect the final results of the survey, the following shall be completed:

CARDS CORRECTED

DATE	TIME REQUIRED	INITIALS
REMARKS:		
	~(
	•	
	REGISTRY NO.	
•		
	containing the data for reflect the changes made	
	tape has been updated to	
	MAGNETIC TAPE CORRECTED	
DATE	TIME REQUIRED	INITIALS
REMARKS:		
•		

H-9014

Items for Future Presurvey Review

There are no prior surveys which cover this survey area.

Position Lat.	Index Long.	Bottom Change Index	Use <u>Index</u>	Resurvey Cycle (Years)
590	1541	. 4	0	50
590	1542	4	0	50
591	1541	4	0	50
591	1542	4	0	50

OFFICE OF MARINE SURVEYS AND MAPS MARINE CHART DIVISION MODIFIED HYDROGRAPHIC SURVEY REVIEW

REGISTRY NO. H-9014

FIELD NO. PF-10-1-68

Alaska, Kamishak Bay, McNeil Head to Chenik Head

SURVEYED: May 27 through August 7, 1968

SCALE: 1:10,000 PROJECT NO.: OPR-429

SOUNDINGS: DE-723 Depth Recorder CONTROL: Sextant Fixes on

Shore Signals,

Raydist

Chief of Party	B. C. Renneke
**************	P. B. Clark
	D. C. Harrison
	C. D. Iles
	D. M. Mauthe
	W. W. Spychalla
Automated Plot by	Gerber Digital Plotter (PMC)
Verified by	F. L. Rosario
Reviewed by	R. W. DerKazarian
	Date: October 24, 1975
Inspected by	R. H. Carstens

1. <u>Control and Shoreline</u>

The origin of control is adequately discussed in Paragraph F of the Descriptive Report.

The shoreline originates with Class I unreviewed photogrammetric manuscripts T-13279 through 13283 of 1962-68. The mean high water line is shown for guidance only; the true position is shown on the topographic surveys previously mentioned.

Hydrography

- A. Depths at crossings are in fair agreement. (See Paragraph 3A.)
 - B. The usual depth curves are adequately delineated.

C. The development of the bottom configuration and the investigation of least depths are considered adequate. However, additional investigation of questionable traces on the fathograms of Fathometer No. 935 in an area 1/4 mile north of the reef in the southeast limit of the survey would have been desirable.

3. Condition of the Survey

The field work, sounding records, smooth plot, sounding printout, and Descriptive Report are adequate and conform to the requirements of the Hydrographic Manual supplemented by the Instruction Manual - Automated Hydrographic Surveys, except for the following:

A. Discrepancies noted during verification of several crosslines and lines of hydrography of as much as ± 0.6 fathoms were resolved at the Pacific Marine Center by assuming a time zone correction of one hour for tide correctors. The corrections brought these soundings into agreement with surrounding hydrography that used the 135° time zone. The tide tabulation was annotated during review to show the time zone used for each day. The lack of this annotation during verification made the reviewer's work very difficult and time consuming in determining what had taken place. Listed below are the affected days and positions that were adjusted to the various time zones.

Launch	<u>Day</u>	Time Zone	<u>Positions</u>
1	161	120	0559-0675
. 1	169	120	1083-1149
1	170	120	1153-1213
3	160	150	6001-6064
Walked			
Shoreline	161	150	8002-8023
•	162	150	8030-8097

- B. The standard ledge and reef symbol were not used on the smooth sheet; a dashed line depicts the limit of the ledge. The reefs were symbolized by symbol at the time of review.
- C. Many stamps in the records were not completed according to the Hydrographic Manual requirements.

- D. Differences noted between photogrammetric manuscripts and the smooth sheet elevations of rocks and ledges are attributed to predicted tides used on the manuscripts and actual tides used by the hydrographer.
- E. The electronic control station was plotted on the smooth sheet during the review.
- F. Many soundings at the crosslines had the tenths erased from the smooth sheet or changed to resolve discrepancies without changing the records. These were revised in the records when found during review.

4. Junctions

An adequate junction was effected with H-9001 (1968-70) on the north, east, and south. No other surveys junction the present survey.

5. Comparison with Prior Surveys

There are no prior surveys which cover this survey area.

6. Comparison with Chart 8554 (latest print date May 25, 1974)

A. Hydrography

The charted hydrography originates exclusively with the boat sheet soundings of the present survey (Bps 76270, 76589-90). The present survey is adequate to supersede the charted hydrography within the common area.

B. Aids to Navigation

There are no aids to navigation within the limits of this survey.

7. Compliance with Project Instructions

This survey adequately complies with the Project Instructions.

8. Additional Field Work

This survey is considered to be a good basic survey and no additional field work is recommended.

Examined and Approved:

Chief

Marine Chart Division (

Associate Director Office of Marine Surveys

and Maps

Form #1

(1) Project No. OPR H29 (L) Requested by COR Helmes (2) H No. To 09.9 (5) Ship or Office PATHFINDER (3) Field No. **K** (6) Date Required ASAP. (7) Visual (9) KKN (8P.5) Distance from CMER to East Edge (NXX = 1) 5.778.810 cor West Edge (NXX = 0). **Is All of Corner of West Edge of Sheet (10) YKN (8P.211) Distance from Equator to South Edge of sheet (11) Central Meridian (12) Survey Scale (13) Size of Sheet (Check one) 36x60 (12) Survey Scale (13) Size of Sheet (Check one) 36x60 (12) NYX, Orientation of sheet (Check one) **AFT	4	PARA_ETERS DIGITAL COMPUTING Form #1
(7) Visual (8) Electronic (9) XKN (SP 5) Distance from CMER to East Edge (NYX = 1) 5,732 880 °C COVER 43) Vor West Edge (NYX = 0). (10) YKN (SP 2h1) Distance from Equator to South Edge of Sheet (11) Central Meridian (12) Survey Scale (13) Size of Sheet (Check one) 36x60		(1) Project No. OPR H29 (4) Requested by cor Holmes
(9) XRN (SP 5) Distance from CMER to East Edge (NYX = 1) 5,738.860 °C or West Edge (NYX = 0). (10) YKN (SP 2L1) Distance from Equator to South Edge of sheet (11) Central Meridian (12) Survey Scale (13) Size of Sheet (Check one) 36x60	30.5	(6) Date Required ASAP
(10) YEN (SP 211) Distance from Equator to South Edge of sheet (11) Central Meridian (12) Survey Scale (13) Size of Sheet (Check one) 36x60 1: 10,000 (14) NYX, Orientation of sheet (Check one) NYX = 1 1: 10,000 (14) NYX, Orientation of sheet (Check one) NYX = 0 1: 10,000 (14) NYX = 0 1: 10,000 (14) NYX = 0 1: 10,000 (14) NYX = 0 1: 10,000 (15) Size of Sheet (Check one) NYX = 0 1: 10,000 (16) Lowest Grid Coreatest Grid		(9) XKN (SP 5) Distance from CMHR to Worth Red - (1975)
(11) Central Meridian (12) Survey Scale (13) Size of Sheet (Check one) 36x60		(10) YKN (SP 241) Distance from Equator to South
(13) Size of Sheet (Check one) 36x60		(11) Central Meridian (12) Survey Scale
NYX = 1 C Mer		(13) Size of Sheet (Check one) 36x60 42x60
C Mer C Mer Lowest Grid + Flotter Origin Grid + Corner of Sheet From Equator to So Edge of Sheet YKN Grid Limits From Equator to So Edge of Sheet YKN Grid Limits From Equator to So Edge of Sheet YKN Grid Limits From Equator to So (15) Greatest Latitude 59 /3 30" (Projection of Sheet Edge (16) Lowest Latitude 59 06' 00" Line Interv Fage 4 Hydr (17) Difference (20) Greatest Longitude 154 16' 00" - (21) Lowest Longitude 154 05 00" (23) 00'		(14) NYX, Orientation of sheet (Check one)
C Mer C Mer Lowest Grid + Flotter Origin Grid + Corner of Sheet From Equator to So Edge of Sheet YKN Grid Limits From Equator to So Edge of Sheet YKN Grid Limits From Equator to So Edge of Sheet YKN Grid Limits From Equator to So (15) Greatest Latitude 59 /3 30" (Projection of Sheet Edge (16) Lowest Latitude 59 06' 00" Line Interv Fage 4 Hydr (17) Difference (20) Greatest Longitude 154 16' 00" - (21) Lowest Longitude 154 05 00" (23) 00'		NYX = 1 🖂
Lowest Grid + Corner of Sheet From Equator to So Edge of Sheet		Grid
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YKN Grid Limits From Equator to South (15) Greatest Latitude 59 13 30" (Projection of Sheet Edge (16) Lowest Latitude 59 06! 00" Line Interv (17) Difference 07 30" (18) 00" (19) 15 (20) Greatest Longitude 154 16 00" (21) Lowest Longitude 154 05 00" (23) 00'		Lowest Plotter Origin Grid + Corner of Sheet From Equator to So
(16) Lowest Latitude 59°06' 00" Page 4 Hydr (17) Difference 07 30 Kanual) (18) 00' (20) Greatest Longitude 154° 16' 00" (21) Lowest Longitude 154° 05° 00' (22) Lowest Longitude 154° 05° 00'' (23) 00'		XKN - 154° 04' 30"
(20) Greatest Longitude 154° 16' 00" - (21) Lowest Longitude 154° 05' 00" (23) 00'		of Sheet Edge (16) Lowest Latitude 59°06' 00" Line Interv Page 4 Hydr (17) Difference (17) Ranual)
(21) Lowest Longitude (54 05 00 (23) 00'		(18) <u>00</u> (19) <u>15</u>
		(21) Lowest Longitude 154 05 00 (23) 00'

COMPUTER PARAMETERS FOR ELECTRONICALLY CONTROLLED SURVEY

	(RANGE	E-RANC	Æ)		O + (
(1) Pro	oject No. OPR 429 (2) H. No.	•		(3) Field 1	10. DOST 740
(4) Тур	oe of Control: SHORAN, RAPORE ONE (RI) SUMA 1967 (010)	AYDIS!	r, HI-F Vr luty lar	IX, RA	DAR Ps)
PYC (C) RAN	addency (for conversion of wards	J.	Latitude	59 • 10	40.76
Ste	ation Name SOMA 1967 - C	·J	Tanattudo	154 · 0.	5 · 21.72
			TOURTONGO		
/41. DAI	NGP MIO (R2)	N/	Latitude	59 · 0	5 . 04.89
St	NGE TWO (R2) CROW 1964 OV	1	Longitude	(53 • 4	2 20.15
•			7		
(7) Az	imuth from Rl to R2		I^{I} .	295 ° C	16 ' 45-27 1-, 30 1-38 :
(8) Ba	seline Length in meters		✓.	24	<u> 1,301.38</u>
(9) Lo	cation of survey with respect to	Elec	tronic Bas	eline: CKE	CK ONE
di th RI	o determine: Imagine an observe rectly at R2 If the survey ar nen A is negative: If the survey GHT then A is positive.)	e sto	inding at R to the obtained to the control to the	l and looki server's <u>II</u> observer's	ing i <u>ft</u>
V (If SHORAN corrections are applied where X is SHORAN distance and D Constant:Coefficients of the equa	ation	here:	,0, 011001 0) = D , ne
. 1	K(R1), C(R1), K	(R2)	, C(F	(2)	
(11)	Number of Velocity Tables to be us	sed:			
	X None,One,Two,		e than Two		urveys logged y if this supply VEL,
	If two tables are to be used, Bo	undar	y defined	,	
	• † 11		atitude ongitude		
(12)	This form applies to all data on This form applies to part of the	this	survey-	χ	•
	Time and Date Limitations: f Position Number Limitations:	rom from	n	to	
	This is Form #3 Sheet #	e <u>1</u>	Sheet 1	or this su	rvey.
! !	COL			,	

	ECTRONICALLY CONTROLLED SURVEY
(1) Project No. <u>OPR 429</u> (2) H. No.	e-range) (3) Field no. <u>Bal Ma</u>
(4) Type of Control:SHORAN, XRA	AYDIST, HI-FIX, RADAR
5) RANGE ONE (R1) Station Name DOMA 1967 (ONO)	Latitude 59 10 40.36 Longitude 154 05 21.78
(6) RANGE TWO (R2) Station Name CRGW 1964 - (00	Longitude 153 • 42 · 20.15
7) Azimuth from R1 to R2	295 06 55.27
(8) Baseline Length in meters	24,301.38
(9) Location of survey with respect to	Electronic Baseline: CHECK ONE
(To determine: Imagine an observe directly at R2 If the survey ar then A is negative: If the survey RIGHT then A is positive.) -A (10) If SHORAN corrections are applied	area is to the observer's
where X is SHORAN distance and D Constant Coefficients of the equa	ation here:
K(R1), C(R1), K' (11) Number of Velocity Tables to be us	
None, One, Two,	- More than Two (For old Surveys logg at WSC only if thi the case, supply VEL, TAPES)
If two tables are to be used, Bo	Latitude Longitude
(12) This form applies to all data or This form applies to part of the	this survey
Time and Date Limitations: f	from to to to
This is Form #3 Sheet # or	f Sheet for this survey.
CAT	

PARACTIC CARD II

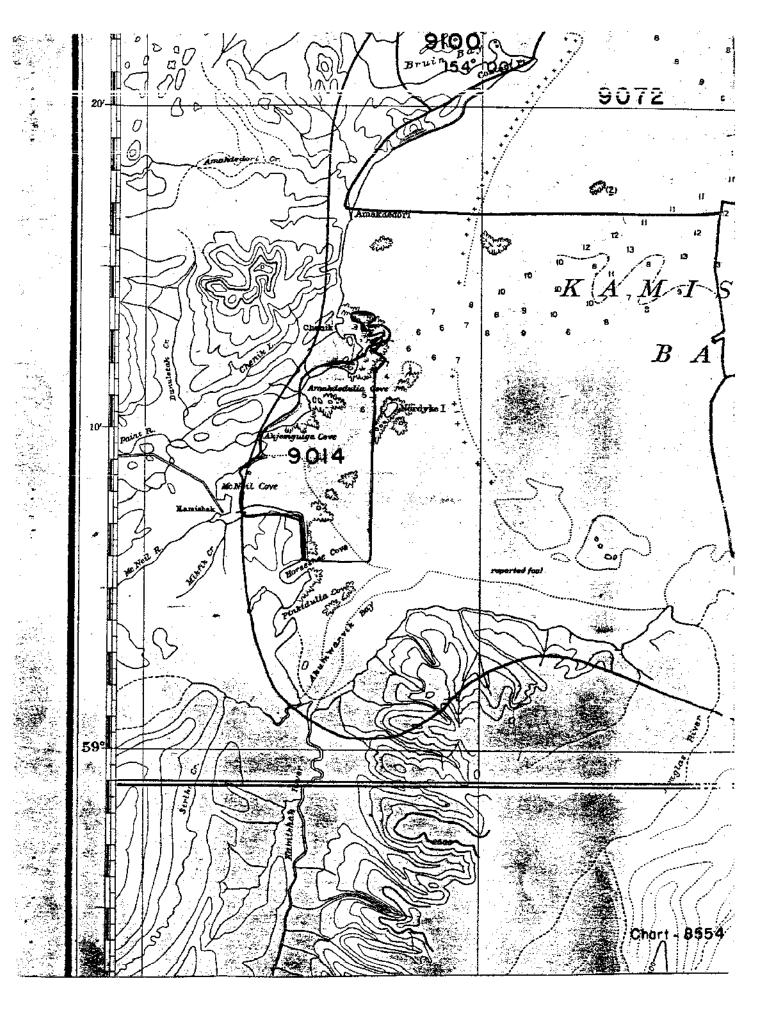
. F.C.F 1	H Identification No.	Feet/Fethom indicator 1 -	$(X_{avis} - 1)$ of plotter - to correspond to $(Y_{axis} - 0)$	Flotter Scale/Survey Scale *10.49	ction	tor to	entral meri- P 5	Entition exis of the earth 6.
	•	0 - feet 1 - fathom	(Y axis - 0)	*107.98.6876	()	6,553,/35, 9 meters	5,731.83 motors_	6,378,206,4
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REPORTED IN
CARD
III

	(Interral (Lat)		Internal (Long)	•	Difference between Grid		Lowest long. Intersection		Lowest Lat. Intersection		
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* CHANGRO TO 11-# 11/28/68



RECORD OF APPLICATION TO CHARTS

H-9014

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. _

INSTRUCTIONS

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart.

1. Letter all information.

2. In "Remarks" column cross out words that do not apply.

3. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.

CHART	DATE	CARTOGRAPHER	REMARKS
8554	12/11/14	S. Marty	Full Part Before After Verification Review Inspection Signed Via
			Drawing No. Examined for Notice to Marines.
			No Notices Required,
3502	1/30/75	C.S. Forber	Feet Part Refere After Verification Review Inspection Signed Via
	/		Drawing No. Examined for critical corrections thru
	,		F354- None Oppl. Sofre Fall Part Before After Verification Review Inspection Signed Via
8500	3/14/15	H. Borowski	Fall-Part Before After Verification Review Inspection Signed Via
			Drawing No. Examined Mocorr.
		•	
8554	11/24/75	m. D. Kanis	Full Part Before After Verification Review Inspection Signed Via
			Drawing No. Applied hydro
16640	4/25/78	KANIS	Full Post Before After Verification Review Inspection Signed Via
	,		Drawing No. A. J. Pr 1 # 18
16013	8/2/19	Oven R. Stunbel	Full Barr Before After Verification Review Inspection Signed Via
	·		Drawing No. 25 Applied thru chart 16640
·			
531	8/4/79	Open E Stembel	Full Pare Before After Verification Review Inspection Signed)Via
(8500)	, , ,		Drawing No. 16 Fully applied thru short 16013/8502
16648	3/9/79	DA Cloments	Full Post Before After Verification Review Inspection Signed Via
			Drawing No.
·		· · · · · · · · · · · · · · · · · · ·	Full Part Before After Verification Review Inspection Signed Via
			Drawing No.
			/
			Full Part Before After Verification Review Inspection Signed Via
			Drawing No.

FORM CAGS-8382 SUPERSEDES ALL EDITIONS OF FORM CAGS-978.

USCOMM-DC 8558-P63