8536

Original

Diag. Cht. No. 8802-3.

Form 504

U. S. DEPARTMENT OF COMMERCE

COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Type of Survey HYDROGRAPHIC

Field No. PF-20-2-60 Office No. H-8536

LOCALITY

State AIASKA

General locality NORTH SIDE AIASKA PENINSULA

Locality CAPE KUTUZOF

1960

CHIEF OF PARTY
M.E. WENNERMARK, CAPT, C&GS, COMDG
USC&GS Ship PATHFINDER

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DATE DEC 18 1973

COMM-DC 61300

Charts
8802
9302 NK

8536

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-8536

Field No. PF-20-2-60

State ALASKA

General locality CAPE KUTUZOF

Locality North Side Alaska Peninsula

Scale 1:20,000 Date of survey 12-29 August 1960

Instructions dated 30 October 1958, Suppl. 6 January 1960, 25 Feb. 1960, 8 April 1960, Amended Instr. 25 April 1960

Vessel USC & GS Ship PATHFINDER

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

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

Soundings taken by ~~echo sounder~~, graphic recorder, hand lead, ~~wire~~

Fathograms scaled by Ship Personnel

Fathograms checked by Ship Personnel

Protracted by Seattle Processing Office

Soundings penciled by Seattle Processing Office

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

REMARKS:

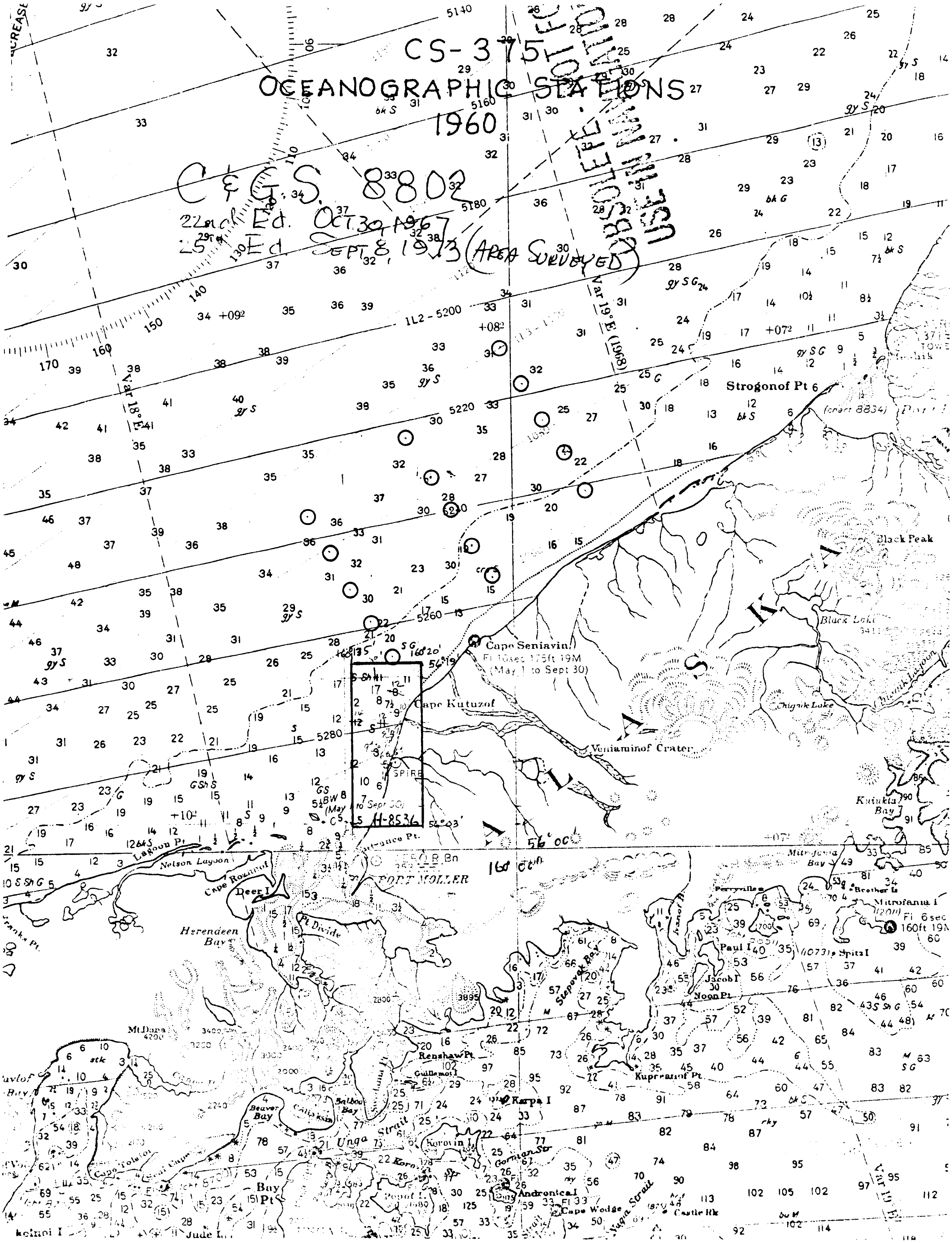
Control: Shoran & Visual

Smooth plotted by Seattle Processing Office

Cht 9302 8802

Applied to chts 2-28-74 DAB

U. S. GOVERNMENT PRINTING OFFICE 777032


CS-375
OCEANOGRAPHIC STATIONS
1960
C&GS 8802
22nd Ed. Oct 30, 1967
25th Ed. Sept 8, 1973 (AREA SURVEYED)
Strogonof Pt
Black Peak
Black Lake
Chignik Lake
Cape Seniavin
Fl 10sec 175ft 19M
(May 1 to Sept 30)
Cape Kutuzof
Veniaminof Crater
SPIRE
H-8536
Lagoon Pt
Nelson Lagoon
Cape Rozhnof
Deer I
PORT MOLLER
Herendeen Bay
Pt Divide
Perryville
Mitrofania I
Paul I
Jacob I
Noon Pt
Spitz I
Stepovak Bay
Kupreanof Pt
Renshaw Pt
Guillemot I
Karpa I
Beaver Bay
Balboa Bay
Unga Strait
Korovin I
Andronica I
Cape Wedge
Castle Rk
Nagai Strait
Cape Tolstoi
Mt Dana
Bay Pt
Jude I
Var 18°E
Var 19°E (1968)
1L2-5200

DESCRIPTIVE REPORT TO ACCOMPANY
HYDROGRAPHIC SURVEY H-8536 (PF-20-2-60)

12-29 August 1960

USC&GSS PATHFINDER — M. E. Wennermark, CAPT.,C&GS,Comdg.

A. PROJECT

This sheet is a part of Project CS-375. The original instructions are dated 20 December 1954. Revised instructions were forwarded 30 October 1958, which cancelled all previous instructions. Supplemental Instructions dated 6 January 1960, 25 February 1960, and 8 April 1960. In addition amended instructions dated 25 April 1960 were received.

B. SURVEY LIMITS AND DATES

The general locality is on North Side of Alaska Peninsula. The coordinate limits of the area are as follows:

Lat 56°18.4'N	Lat 56°18.4'N
Long 160° 20.7'W	Long 160° 34.0'W
Lat 56°04.3'N	Lat 56° 03.7'N
Long 160° 34.0'W	Long 160° 30.1'W

Work began on 12 August 1960 and was completed on 29 August 1960.

C. VESSEL AND EQUIPMENT

Hydrography was run by Ship PATHFINDER and PATHFINDER Launches #1, 2, 3 and 4. Hydrography, from beach to approximately 2½ miles offshore, was done by Launches #1, 2, 3 and 4. The remaining by the Ship. The Launches and the Ship were equipped with 808 fathometers, calibrated at 800 fathoms per second-serial numbers as follows: No. 57-29 (Launch #1), No 57-22 (Launch #2), No 57-23 (Launch #3), No 74S (Launch #4) and No 52 (Ship PATHFINDER)

A total of 51 bottom samples were taken by the various launches and the Ship.

D. TIDE AND CURRENT STATIONS

The tide station used for this survey was the standard gage at Port Moller, Alaska (Pacific American Cannery Pier), Latitude 55° 59.43'N, Longitude 160° 33.65'W. For actual tides a time correction (0.0) and height ratio correction (1.0) were supplied by the Washington Office.

No current stations were occupied.

E. SMOOTH SHEET

The projection was constructed aboard ship. The control has not been plotted nor have the shoran arcs been drawn.

F. CONTROL STATIONS

Triangulation control on this sheet was established in 1950 by J.H. Brittain, USC&GS.

Shoran Station NEL (Latitude 56°00' 40.27"N Longitude 161°07' 50.64"W) was rebuilt on the 1959 site, an unmarked station. A wooden base plate, staked down, marked the previous years site. The station was originally located by a taped distance and sextant angle from triangulation station NELSON, 1950.

Shoran Station KUTU (Latitude 56°16' 41.04'N Longitude 160°21'12.70"W) was built near marked topographic Station ZOF, 1960. ZOF was located by theodolite cuts of less than third order accuracy. A 100 foot mast without reflectors was used. See Shoran Report, 1960 Season, for futher details.

Triangulation, topographic and hydrographic signals listed below were located by standard methods:

ABE	FLIT, 1950
BEAR RIVER CHURCH SPIRE, 1950	GAD
BEAUTY AZIMUTH MARK, 1950	HOW
BOY	IVY
CABIN, 1950	JIG
CAT	JULIA,1950
DOG	KUTUZOF, 1950
EAT	LUG
FAT	MAR

G. SHORELINE AND TOPOGRAPHY

Shoreline was transferred from blueline copies of advance manuscripts T-9567, T-9569, and T-9571.

In the vicinity of hydrographic signal MAR, it is noted that the inshore line of hydrography crosses over the shoreline shown on the manuscript. It should be noted that a very strong coastwise current sweeps the peninsula at each tide change. Therefore on a sand beach is a continuous scouring and building of the Littoral Zone. Any MHW line shown would be subject to annual change varing from less than 1 meter to several meters. Time did not permit running a planetable survey of the shoreline concerned in this project. Appropriate notes as to the present shoreline are shown on field photographs, ozalid prints, and on the manuscripts concerned. Forwarded to the Washington Office. See Ltr file 6311/lrw, dated 7 October 1960, signed Charles Pierce.

H. SOUNDINGS

Soundings taken by the Launches were made with 808 fathometer, operating at a calibrated velocity of 800 fathoms per second. Velocity corrections were computed and entered in the sounding volumes. The initial settings were maintained at zero. However, corrections in the sounding volumes were made when the initial varied. The Launches obtained depth recorder corrections by phase comparison and bar check.

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

An abstract of fathometer corrections is attached to this report.

I. CONTROL OF HYDROGRAPHY

Hydrography was controlled by either shoran or visual control from signals located by triangulation and sextant methods.

Three shoran stations were used in the survey, NEL, KUTU and SHIP. The Ships position was controlled by stations KUTU & NEL. Launches using shoran control used stations KUTU and SHIP. According to Supplemental Instructions dated 25 February 1960, instances where the shoran signal passed over intervening land, visual control was used. As a result visual hydrography was run by launches between hydrographic signals BOY and LUG from the beach to one mile offshore.

J. ADEQUACY OF SURVEY

The smooth sheet has not been plotted, however, boat sheet data is complete and indicates the survey is adequate to supercede prior surveys. See addendum from Processing Office.

K. CROSSLINES

Crosslines on boat sheet plot are satisfactory and there should be no discrepancies in smooth plot. See addendum from Processing Office.

L. & M. COMPARISON WITH PRIOR SURVEYS AND CHART

See addendum from Processing Office.

N. DANGERS AND SHOALS

There are no dangers to navigation on this sheet. Shoals, especially longshore sandbars are not a menace to navigation, but are of concern to the numerous gillnetters which operate out of Port Moller in the summer months. These sandbars constantly shift position. The position at the time of surveying will be evident in smooth plot.

P. AIDS TO NAVIGATION

There are no aids to navigation in the area.

Q. LANDMARKS FOR CHARTS

No additional landmarks are recommended.

S. SILTED AREAS

There are no silted areas along this open coast.

Z. TABULATION OF APPLICABLE DATA

1. Tide Note
2. Shoran Report and Abstracts
3. Photogrammetric Report
4. Fathometer Report and Abstracts

Respectfully submitted,

Charles B. Ellis

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

TIDE NOTE

TO ACCOMPANY HYDROGRAPHIC SURVEY

H-8536 (PF-20-2-60)

Tide Reducers were derived from hourly heights furnished by The Washington Office. A standard tide gage was re-established on the Pacific American Cannery Pier, Port Moller, Alaska (135W). (Latitude 55° 59.43'N, longitude 160° 33.65'W). Time and range corrections of 1.0 ratio, 0.0 hours were furnished by the Washington Office. See Letter file 2221-468-982 paf, dated 3 November 1960, signed L.P.Disney.

GEOGRAPHIC NAMES

Survey No. H-8536

Name on Survey	On Chart No. A	On previous survey No. B	On U. S. quadrangle Maps C	From local information D	On local Maps E	P. O. Guide or Map F	Rand McNally Atlas G	U. S. Light List H	K	
ALASKA PENINSULA										1
BEAR RIVER										2
BRISTOL BAY										3
CAPE KUTUZOF										4
FRANKS LAGOON										5
KING SALMON RIVER										6
SANDY RIVER										7
										8
										9
										10
										11
										12
										13
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										26
										27

Approved by:
Chas. P. Harrington
Staff Geographer
12 April 1974

SHORAN CORRECTIONS

Launch Set #581

LAUNCH 1

Station - Kutu & Nel

ALL LAUNCH #1 HYDRO DAYS

Rate station zero check between	99.776 and 99.785	Table 1
" " " "	99.786 and 99.795	Table 2
" " " "	99.796 and 99.805	Table 3
" " " "	99.806 and 99.815	Table 4

Distance in miles	Table 1	Table 2	Table 3	Table 4
0.00 - 1.95	+0.03	+0.02	+0.01	0.00
1.96 - 5.23	+0.02	+0.01	0.00	-0.01
5.24 - 8.59	+0.01	0.00	-0.01	-0.02
8.60 - 11.94	0.00	-0.01	-0.02	-0.03
11.95 - 15.35	-0.01	-0.02	-0.03	-0.04
15.36 - 18.75	-0.02	-0.03	-0.04	-0.05

Station Ship

Drift station zero check between	99.771 and 99.780	Table 5
" " " "	99.781 and 99.790	Table 6
" " " "	99.791 and 99.800	Table 7

Distance in miles	Table 5	Table 6	Table 7
0.00 - 2.28	+0.05	+0.04	+0.03
2.29 - 5.60	+0.04	+0.03	+0.02
5.61 - 8.95	+0.03	+0.02	+0.01
8.96 - 12.33	+0.02	+0.01	0.00
12.34 - 15.65	+0.01	0.00	-0.01
15.66 - 19.00	0.00	-0.01	-0.02
19.01 - ---	-0.01	-0.02	-0.03

Tab. WGS Checked RMS

SHORAN CORRECTIONS

Launch Set #491
LAUNCH 2

Station-Rutu & Mel

ALL LAUNCH AND HYDRO DAYS

Rate Station zero check between	99.776 and 99.785	Table 1
" " " "	99.786 and 99.795	Table 2
" " " " "	99.796 and 99.805	Table 3
" " " " "	99.806 and 99.815	Table 4

Distance in miles	Table 1	Table 2	Table 3	Table 4
0.00 - 1.95	+0.03	+0.02	+0.01	0.00
1.96 - 5.30	+0.02	+0.01	0.00	-0.01
5.31 - 8.60	+0.01	0.00	-0.01	-0.02
8.61 - 11.93	0.00	-0.01	-0.02	-0.03
11.94 - 15.25	-0.01	-0.02	-0.03	-0.04
15.26 - 18.60	-0.02	-0.03	-0.04	-0.05

Station Ship

Drift station zero check between	99.776 and 99.785	Table 5
" " " " "	99.786 and 99.795	Table 6
" " " " "	99.796 and 99.805	Table 7
" " " " "	99.805 and 99.815	Table 8

Distance in miles	Table 5	Table 6	Table 7	Table 8
0.00 - 3.00	+0.06	+0.05	+0.04	+0.03
3.01 - 6.35	+0.05	+0.04	+0.03	+0.02
6.36 - 9.75	+0.04	+0.03	+0.02	+0.01
9.76 - 13.10	+0.03	+0.02	+0.01	0.00
13.11 - 16.42	+0.02	+0.01	0.00	-0.01

Tab, RMS Checked WGS

SYCOM CORRECTIONS

Launch Set #1352

LAUNCH 3

Station-Kutu & Nel

ALL LAUNCH #3 HYDRO DAYS

Rate Station Zero Check between 99.776 and 99.785 Table 1

Rate Station Zero Check between 99.786 and 99.795 Table 2

Rate Station Zero Check between 99.796 and 99.805 Table 3

Distance in miles	Table 1	Table 2	Table 3
0.00 - 2.70	+0.02	+0.01	0.00
2.71 - 7.40	+0.01	+0.00	-0.01
7.41 - 12.20	0.00	-0.01	-0.02
12.21 - 16.90	-0.01	-0.02	-0.03

Station Ship

Drift Station Zero Check between 99.776 and 99.785 Table 4

Drift Station Zero Check between 99.786 and 99.795 Table 5

Drift Station Zero Check between 99.796 and 99.805 Table 6

Drift Station Zero Check between 99.806 and 99.815 Table 7

Drift Station Zero Check between 99.816 and 99.825 Table 8

Distance in miles	Table 4	Table 5	Table 6	Table 7	Table 8
0.00 - 4.75	+0.02	+0.01	0.00	-0.01	-0.02
4.76 - 9.40	+0.01	0.00	-0.01	-0.02	-0.03
9.41 - 14.00	0.00	-0.01	-0.02	-0.03	-0.04

Tabulated:

Checked:

SHORAN CORRECTIONS

Launch Set #1313

LAUNCH 4

Station - Kutu & Nel (Rate)
Station - Ship (Drift)
ALL LAUNCH #4 HYDRO DAYS

Rate Station Zero Check between	99.776 and 99.785	Table 2
Rate Station Zero Check between	99.786 and 99.795	Table 3
Drift Station Zero Check between	99.786 and 99.795	Table 1
Rate Station Zero Check between	99.796 and 99.805	Table 4
Drift Station Zero Check between	99.796 and 99.805	Table 2
Drift Station Zero Check between	99.806 and 99.815	Table 3

Distance in miles	Table 1	Table 2	Table 3	Table 4
0.00 - 0.38	+0.05	+0.04	+0.03	+0.02
0.39 - 2.05	+0.04	+0.03	+0.02	+0.01
2.06 - 3.70	+0.03	+0.02	+0.01	0.00
3.71 - 5.34	+0.02	+0.01	0.00	-0.01
5.35 - 7.00	+0.01	0.00	-0.01	-0.02
7.01 - 8.68	0.00	-0.01	-0.02	-0.03
8.69 - 10.32	-0.01	-0.02	-0.03	-0.04
10.33 - 12.00	-0.02	-0.03	-0.04	-0.05
12.01 - 13.65	-0.03	-0.04	-0.05	-0.06
13.66 - 15.30	-0.04	-0.05	-0.06	-0.07

Tabulated:
Checked:

SHORAN CORRECTIONS

Ship Set 1192

Station Smok

ALL SHIP HYDRO DAYS

Drift Station Zero Check between	99.786 and 99.795	Table 1
Drift Station Zero Check between	99.796 and 99.805	Table 2
Drift Station Zero Check between	99.806 and 99.815	Table 3
Drift Station Zero Check between	99.816 and 99.825	Table 4

Distance in miles	Table 1	Table 2	Table 3	Table 4
20.00 - 25.65	-0.01	-0.02	-0.03	-0.04
25.66 - 31.20	-0.02	-0.03	-0.04	-0.05
31.21 - 36.80	-0.03	-0.04	-0.05	-0.06
36.81 - 40.00	-0.04	-0.05	-0.06	-0.07

Tabulated: W W
Checked: R B

SHORAN CORRECTIONS

Ship Set #1192

PATHFINDER

Station Kutu

ALL SHIP HYDRO DAYS

Rate Station Zero Check between				99.756 and 99.765	Table 1
Drift	"	"	"	"	99.776 and 99.785	Table 1
Rate	"	"	"	"	99.766 and 99.775	Table 2
Drift	"	"	"	"	99.786 and 99.795	Table 2
Rate	"	"	"	"	99.776 and 99.785	Table 3
Drift	"	"	"	"	99.796 and 99.805	Table 3
Rate	"	"	"	"	99.786 and 99.795	Table 4
Drift	"	"	"	"	99.806 and 99.815	Table 4
Rate	"	"	"	"	99.796 and 99.805	Table 5
Rate	"	"	"	"	99.806 and 99.815	Table 6

Distance in miles	Table 1	Table 2	Table 3	Table 4	Table 5	Table 6
0.00 - 4.10	+0.03	+0.02	+0.01	0.00	-0.01	-0.02
4.11 - 8.70	+0.02	+0.01	0.00	-0.01	-0.02	-0.03
8.71 - 13.25	+0.01	0.00	-0.01	-0.02	-0.03	-0.04
13.26 - 17.80	0.00	-0.01	-0.02	-0.03	-0.04	-0.05
17.81 - 22.35	-0.01	-0.02	-0.03	-0.04	-0.05	-0.06
22.36 - 27.00	-0.02	-0.03	-0.04	-0.05	-0.06	-0.07
27.01 - 31.55	-0.03	-0.04	-0.05	-0.06	-0.07	-0.08
31.56 - 36.20	-0.04	-0.05	-0.06	-0.07	-0.08	-0.09
36.21 - - -	-0.05	-0.06	-0.07	-0.08	-0.09	-0.10

Tabulated: MHB

Checked: CFF

SHORAN CORRECTIONS
PATHFINDER

Ship Set #1192

Station Nel

ALL SHIP HYDRO DAYS

Rate	Station	Zero	Check	between	99.756 and 99.765 Table 1
Drift	"	"	"	"	99.776 and 99.785 Table 1
Rate	"	"	"	"	99.766 and 99.775 Table 2
Drift	"	"	"	"	99.786 and 99.795 Table 2
Rate	"	"	"	"	99.776 and 99.785 Table 3
Drift	"	"	"	"	99.796 and 99.805 Table 3
Rate	"	"	"	"	99.786 and 99.795 Table 4
Drift	"	"	"	"	99.806 and 99.815 Table 4
Drift	"	"	"	"	99.816 and 99.825 Table 5

Distance in miles	Table 1	Table 2	Table 3	Table 4	Table 5
0.00 - 1.90	+0.07	+0.06	+0.05	+0.04	+0.03
1.91 - 4.38	+0.06	+0.05	+0.04	+0.03	+0.02
4.39 - 6.90	+0.05	+0.04	+0.03	+0.02	+0.01
6.91 - 9.38	+0.04	+0.03	+0.02	+0.01	0.00
9.39 - 11.85	+0.03	+0.02	+0.01	0.00	-0.01
11.86 - 14.36	+0.02	+0.01	0.00	-0.01	-0.02
14.37 - 16.87	+0.01	0.00	-0.01	-0.02	-0.03
16.88 - 19.35	0.00	-0.01	-0.02	-0.03	-0.04
19.36 - 21.82	-0.01	-0.02	-0.03	-0.04	-0.05
21.83 - 24.33	-0.02	-0.03	-0.04	-0.05	-0.06
24.34 - 26.85	-0.03	-0.04	-0.05	-0.06	-0.07
26.86 - 29.35	-0.04	-0.05	-0.06	-0.07	-0.08
29.36 - 31.85	-0.05	-0.06	-0.07	-0.08	-0.09
31.86 - 34.35	-0.06	-0.07	-0.08	-0.09	-0.10
34.36 - 36.85	-0.07	-0.08	-0.09	-0.10	-0.11
36.86 - 39.35	-0.08	-0.09	-0.10	-0.11	-0.12

Tab. WGS
Checked: Cab

TABULATION - VELOCITY CORRECTIONS
ALASKAN PENINSULA
Project CS-375

Ship PATHFINDER 11 August to 9 September 1960

Corrn.	Depth
0.0	to 6.0 fm
+0.1	to 14.4 fm
+0.2	to 22.0 fm
+0.3	to 31.2 fm
+0.4	to 40+ fm

Launch Hydrography 23 July to 10 August 1960

Corrn.	Depth
0.0	to 12.8 fm
+0.1	to 70.0 + fm

Launch Hydrography 11 August to 9 September 1960

Corrn.	Depth
0.0	to 4.0 fm
+0.1	to 11.7 fm
+0.2	to 19.5 fm
+0.3	to 30.5 fm
+0.4	to 40.0 fm

FATHOMETER CORRECTIONS
Ship PATHFINDER
#130-S

SP-4-60 #130-S

Day	Correction A	B
A	+0.2	-1.7

CS-375 20-2-60 #52

E	+0.4
F	+0.4
H	+0.3

60-1-60 #130-S

A	+0.3
B	+0.3
C	+0.2

#52

C	+0.4
D	+0.4
E	+0.3
F	+0.3
G	+0.5
H	+0.3

FATHOMETER CORRECTIONS
CS-375 1960

LAUNCH	CORRECTION
1 (57-29)	+0.3
2 (57-22)	+0.3
3 (57-23)	+0.3
4 (74-8)	+0.3

APPROVAL SHEET

TO ACCOMPANY HYDROGRAPHIC SURVEY

H-8536 (PF-20-2-60)

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

NOAA FORM 77-27
(9-72)
(PRESC. BY HYDROGRAPHIC MANUAL 20-2, 6-94, 7-13)

U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

HYDROGRAPHIC SURVEY STATISTICS

HYDROGRAPHIC SURVEY NO. H-8536

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

RECORD DESCRIPTION	AMOUNT	RECORD DESCRIPTION	AMOUNT
SMOOTH SHEET	1	BOAT SHEETS 4 (3 Mylar)	4
DESCRIPTIVE REPORT	1	OVERLAYS	

DESCRIPTION	DEPTH RECORDS	HORIZ. CONT. RECORDS	PRINTOUTS	TAPE ROLLS	PUNCHED CARDS	ABSTRACTS/ SOURCE DOCUMENTS
ENVELOPES	1					
CAHIERS	1					
VOLUMES	17	5				
BOXES						

T-SHEET PRINTS *(List)* ~~T-9567, T-9569, T-9571~~

SPECIAL REPORTS *(List)* Report on Shoran Operations 1960, USC&GSS PATHFINDER Project CS-375, Project SP-4-60 Lib. 2-27-74

OFFICE PROCESSING ACTIVITIES

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

PROCESSING ACTIVITY	AMOUNTS			
	PRE-VERIFICATION	VERIFICATION	REVIEW	TOTALS
~~POSITIONS ON SHEET~~				3144
POSITIONS CHECKED		4		
POSITIONS REVISED		✓		
DEPTH SOUNDINGS REVISED		✓		
DEPTH SOUNDINGS ERRONEOUSLY SPACED				
SIGNALS ERRONEOUSLY PLOTTED OR TRANSFERRED				
	TIME (MANHOURS)			
TOPOGRAPHIC DETAILS		✓		
JUNCTIONS				
VERIFICATION OF SOUNDINGS FROM GRAPHIC RECORDS		✓		
SPECIAL ADJUSTMENTS		✓		
ALL OTHER WORK		✓		
TOTALS		764		

PRE-VERIFICATION BY	BEGINNING DATE	ENDING DATE
VERIFICATION BY Vincent F. Flor & Others	BEGINNING DATE 1961	ENDING DATE 6 Dec. 1973
REVIEW BY	BEGINNING DATE	ENDING DATE

* U.S. G.P.O. 1972-769-562/439 REG. #6

FORM C&GS-946A
(REV. 11-65)
(PRES. BY HYDROGRAPHIC MANUAL, 6-94)

U.S. DEPARTMENT OF COMMERCE
ESSA
COAST AND GEODETIC SURVEY

VERIFIER'S REPORT

HYDROGRAPHIC SURVEY, H 8536

INSTRUCTIONS - This form serves to identify items of a check list in verification together with items which are separately reported to the Reviewer. The form is not to be forwarded to the Reviewer. A report, which is prepared for the Reviewer, should identify items by number and letter and will be filed in the Descriptive Report until the survey is reviewed.

CL - Check List Items: should be checked as having been completed during the verification processes.

R - Report Item: This column refers to those items reported to the reviewer and is used to indicate the items discussed.

Part I - DESCRIPTIVE REPORT	CL	R
Note: The verifier should first read the Descriptive Report for general information and problems.		
1. The Descriptive Report was consulted, paragraphs checked if found satisfactory, and notations were made in soft black pencil regarding action taken. Remarks Required: -- None	X	
2. Soundings originating with the survey and mentioned in the Descriptive Report have been verified and checked in soft black pencil, including latitude and longitude, together with position identification. Remarks Required: --None	X	
3. All reference to survey sheets mentioned in the Descriptive Report should include registry number and year. Remarks Required: -- None	X	
Part II - SHORELINE AND SIGNALS		
4. Source of shoreline signals Remarks Required: -- List all surveys		
a. Give earliest and latest dates of photographs July, '52, Aug '54 & June, '55	X	
b. Field inspection date 1940-1950		
c. Field Edit date		
d. Reviewed-Unreviewed		
The transfer of contemporary topographic information was carefully examined and reconciled with the hydrography. Remarks Required: -- Discuss remaining differences.		
6. The plotting of all triangulation stations, topographic stations and hydrographic signals has been checked and noted in processing stamp No. 42 on the smooth sheet. Remarks Required: -- None	X	
7. Objects on which signals are located and which fall outside of the high-water line have been described on the sheet. Remarks Required: -- List those signals still unidentified.	X	
Part III - JUNCTIONS		
Note: Make a cursory comparison preliminary to inking soundings in area of overlap.		
8. All junctions of contemporary or overlapping sheets were transferred in colored ink and overlapping curves were made identical. Remarks Required: -- None	NONE	
9. The notation in slanted lettering "JOINS H---- (19)" was added in colored ink for all verified contemporary adjoining or overlapping sheets. Those not verified are shown in pencil. Remarks Required: -- None	NONE	

Part III - JUNCTIONS (Continued)	CL	R
10. Junctions with contemporary surveys were satisfactory except as follows: Remarks Required: -- Consider conditions after adjustments have been made; note adjustments made. Make special notes of Butt junctions and areas which are SUPERSEDED.	NONE	
Part IV - VOLUMES		
11. All items affecting the plotting of the survey which are entered in the remarks columns of the sounding records were noted and check marked. In all cases appropriate action was taken and exceptions noted in the volumes. Remarks Required: -- None	X	
12. Condition of sounding records was satisfactory except as follows: Remarks Required: -- Mention deficiencies in completeness of notes or actions for the following:		
(a) rocks	X	
(b) line turns	X	
(c) position values of beginning and ending of lines	X	
(d) bar check or velocity correctors	X	
(e) time recording	X	
(f) notes or markings on fathograms	X	
(g) was reduction of soundings accurately done?	YES	
(h) was scanning accurate?	YES	
(i) were peaks at uneven intervals missed?	NO	
(j) were stamps completed?	YES	
(k) references to adjacent features		
Part V - PROTRACTING		
13. All positions verified instrumentally were check marked in color in the sounding records, and verifier initialed the processing stamp. Remarks Required: -- None	X	
14. The protracting and plotting of all unsatisfactory crossings were verified. Remarks Required: -- None	X	
15. All detached positions locating critical soundings, rocks, buoys, breakers, obstructions, kelp, etc., were verified and the position numbers are legible. Remarks Required: -- None	X	

Part V - PROTRACTING (Continued)	CL	R
16. The protracting was satisfactory except as follows: Remarks Required: -- Refers to protracting in general except for specific faults repeated often, or faults in control information, which required considerable replotting or adjustments.		
17. The protractor has been checked within the last three months. Remarks Required: -- Date of check, type of protractor and number.		
Part VI - SOUNDINGS		
18. All soundings are clear and legible, and critical soundings are a little larger than adjacent soundings. Remarks Required: -- None	X	X
19. Sounding line crossings were satisfactory except as follows: Remarks Required: -- Discuss adjustments.	X	
20. The spacing of soundings as recorded in the records was closely followed; Remarks Required: -- None	X	
21. The scanning, reduction, spacing, plotting of questionable soundings have been verified. Remarks Required: -- None	X	
22. The smooth plotting of soundings was satisfactory except as follows: Remarks Required: -- Refer to legibility, errors in spacing, and errors in numbers - but not to errors in scanning.	X	
Part VII - CURVES		
23. The depth curves have been inspected before inking. Remarks Required: -- By whom was the penciled curves inspected.	X	X
24. The low-water line and delineation of shoal areas have been properly shown in accordance with the following: a. From T-Sheet in dotted black lines b. From soundings in orange c. Approximate position of sketched curve is dashed orange d. Approximate position of shoal area not sounded in black dashed Remarks Required: -- None	X	
25. Depth curves were satisfactory except as follows: (This statement should not refer to the manner in which the curves were drawn). Remarks Required: -- Indicate areas where curves could not be drawn completely because of lack of soundings. For some inshore areas a general statement is sufficient.	X	

Part VIII - AIDS TO NAVIGATION	CL	R
26. All fixed aids located together with those on the contemporary topographic sheets, have been shown on the survey. Remarks Required: -- Conflicts of any nature listed.	NONE	
27. All floating aids listed in the Descriptive Report should be verified and checked in soft black pencil, including latitude and longitude and position identification. Remarks Required: -- None	NONE	
Part IX - BOATSHEET		
28. The boat sheet was constantly compared with the smooth sheet with reference to notes, position of sounding lines and supplemental information. Remarks Required: -- None	X	
29. Heights of rocks awash were correctly reduced and compared with topographic information. Remarks Required: -- Note excessive conflicts with topographic information.		
Part X - GENERAL		
30. All information on the sheet is shown in accordance with figures 82 and 83 in the Hydrographic Manual (Pub. 20-2). Remarks Required: -- None		
31. Unnecessary pencil notes have been removed from the sheet. Remarks Required: -- None	X	
32. Degree, minute values and symbols have been checked; also electronic distance arcs have been properly identified and checked on the smooth sheet. Remarks Required: -- None	X	
33. The bottom characteristics are adequately shown. Remarks Required: -- None		
Part XI - NOTES TO THE REVIEWER		
34. Unresolved discrepancies and questionable soundings.		
35. Notation of discrepancies with photogrammetric survey inserted in report of unreviewed photogrammetric survey or on copy.		
36. Supplemental information.	X	X

Verified by

Vincent F. Flor & Others

Date

6 December 1973

USCOMM-DC 36272-P65

VERIFIER'S REPORT

H-8536 PF-2Ø-2-6Ø

The polyconic projection was prepared by the Ship's personnel. However, the Control and Shoran Arcs were constructed and plotted by the Office of Hydrographic Data Processing, Pacific Marine Center, Seattle, Washington. Information relating to this report will be noted under the heading by the number and letter as on the Verifier's Report, C&GS Form 946A.

PART I DESCRIPTIVE REPORT

Item K. Comparison with Chart

Comparison of the survey with C&GS Chart # 88Ø2 (25th Edition, Sept. 8, 1973) indicates that the area surveyed is approximately one to two fathoms deeper, particularly along the western and northern half of the sheet. One exception is the 8 fathom sounding on the Chart located at Lat. 56° 18.5' N and Long. 16Ø° 25.Ø'W whereas soundings of 12 fathoms are more predominant in that particular area.

Enclosed is a list showing chart comparison with the survey.

Item N. Statistics

Launch	No. of Positions
1	379
2	895
3	44Ø
4	768
Ship	862
	3174

PART VI SOUNDINGS

19. A sounding of 17 fathoms should be shown on the chart at Lat. 56° 18.5'N and Long. 16Ø° 3Ø.Ø'W. Also, there is a well defined 5 fathom curve located at Lat. 56° Ø9' 25"N and Long. 16Ø° 28' 1Ø"W.

PART VII CURVES

The depth curves were penciled and then inspected by Mr. Nick Lestenkof, Cartographic Technician, before inking.

PART XI NOTES TO THE REVIEWER

Several verifiers have worked on this sheet through the years in attempting to resolve difficulties noted in the attached supplement to this report.

You are referred to this supplement for a summary of these difficulties. However, because of the gentle sloping nature of the bottom, the lack of special features and showing no dangers of shoals, it is felt that useful information can be acquired from these data.

Respectfully submitted,

Vincent Flor
Cartographic Technician

H-8536

Comparison with C&GS Chart number 8802, 25th Edition, September 8, 1973 showing location and soundings in fathoms.

Location	Chart	Smooth Sheet
Lat. 56° 18.5' Long. 160° 25.0'	8	12
Lat. 56° 17.5' Long. 160° 29.0'	8	$8\frac{9}{}$ to $9\frac{7}{}$
Lat. 56° 17.0' Long. 160° 27.0'	7½	$8\frac{8}{}$ to $9\frac{2}{}$
Lat. 56° 16.0' Long. 160° 25.0'	9	10 to $10\frac{1}{}$
Lat. 56° 15.0' Long. 160° 33.5'	12	14
Lat. 56° 15.0' Long. 160° 28.5'	11	12
Lat. 56° 13.3' Long. 160° 26.0'	7	$8\frac{7}{}$ to $9\frac{6}{}$
Lat. 56° 11.5' Long. 160° 29.0'	8	$9\frac{4}{}$ to $9\frac{7}{}$
~~Lat. 56° 10.0'~~ Long. 160° 27.5'	~~5~~	~~6 to $6\frac{4}{}$~~

SUPPLEMENT TO VERIFIER'S REPORT

H-8536 North Side Alaska Peninsula PF-2Ø-2-6Ø

Much difficulty has been experienced in trying to get the Shoran Launch work to agree between launches, the Ship and the visual launch work. The Shoran calibration fixes were all replotted and new correctors were computed to see if good agreement could be had by any changes in position that might appear.

Of 3197 positions on the sheet, 3Ø6 or approximately 1Ø%, were visual positions by Launch #2, 753 or about 24%, were Shoran positions by the Ship. 532 of which were strengthened by a theodolite cut from Station ZOF, 196Ø. There is considerable question as to the accuracy of the distances from Station NEL. First of all, the station was used well beyond the limits recommended in the Hydrographic Manual as being reliable. The limit imposed by the constant, k = 1.42, is about 25 miles. The station was used between 22 and 34 miles. In addition to the above, almost all of the Ship sounding lines cross the baseline. However, by using the theodolite cuts, where taken, and using signal KUTU, an approximate correction for NEL was obtained that gave reasonably good agreement in sounding lines for all sounding lines by the Ship. It is believed that the Ship hydrography is satisfactory, at least it is in agreement with its own crossings and adjacent lines.

Launch lines that are controlled by Shoran Stations KUTU and SHIP are something else. What agreement there is was only obtained by applying some very arbitrary corrections to both the launch corrections to Station SHIP and to Station NEL which controlled the position of the Ship while it was acting as Station SHIP. On August 24 and 28, 196Ø, theodolite cuts were taken to the Ship from Station ZOF so that Station SHIP was located by the cut and a distance from Shoran Station KUTU. Corrections from Shoran Station NEL were determined from the theodolite cuts and distance from KUTU and applied to other days and times when no cuts were taken. This worked a lot of the time but often it was necessary to apply an arbitrary correction to Station SHIP, at the Launches, to get agreement with the visual work by Launch #2 and the Ship hydrography and also to keep the Shoran controlled launch positions from plotting above the highwater line as shown on the Shoreline Manuscripts.

It is my opinion that this smooth sheet could be completed using the foregoing system and would probably be accurate enough for the area, but could not be proven or checked for accuracy of plotting because so much has been arbitrary. The bottom, however, shows no dangers or shoals and is a gentle sloping one with no special features. The positions have all been plotted but may need some revision to get agreement when the

soundings are applied. If someone was put on the sheet and could work without interruption, I feel that a satisfactory survey and smooth sheet could evolve in a short period of time.

Respectfully submitted,

for Walter F. Tousley 10/1/73
William M. Martin
Supervisory Cartographic Technician

APPROVAL SHEET

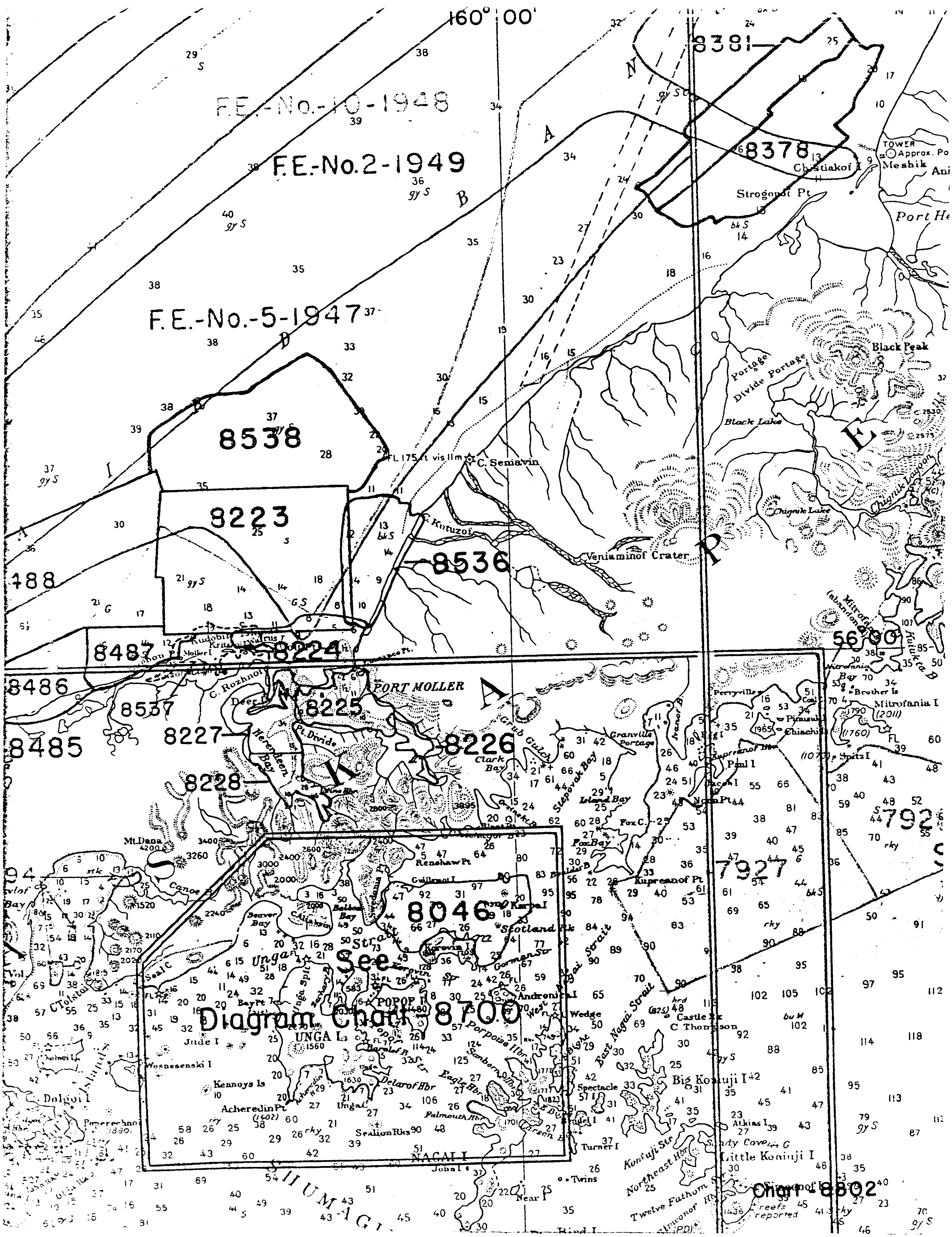
The smooth sheet has been inspected, is complete, and meets the requirements of the General Instructions for automated surveys and the Hydrographic Manual. (Note: All exceptions are listed in the Verifier's Report)

Examined and approved,

James S. Green
Supervisory Cartographic Technician

Approved and forwarded,

Walter F. Forster, Cdr., NOAA
Chief, Processing Division
Pacific Marine Center


160° 00'
F.E.-No.-10-1948
F.E.-No.2-1949
F.E.-No.-5-1947
8381
8378
Chistiakof I
Strogonof Pt
TOWER
Approx. Po
Meshik
Port He
Black Peak
Portage
Divide Portage
Black Lake
Chignik Lake
8538
8223
FL 175 ft vis 11m
C. Seniavin
C. Kutuzof
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8536
488
8487
8224
8486
8537
8485
8225
8227
8226
8228
PORT MOLLER
C. Rozhnof
Herendeen Bay
Pt Divide
Grub Gulch
Clark Bay
Stepovak Bay
Granville Portage
Island Bay
Fox Bay
Ivanof B
Perryville
Kupreanof Pt
Brother Is
Mitrofania I
Mitrofania Bay
5600
792
7927
Mt.Dana
8046
See
Diagram Chart 8700
Renshaw Pt
Guillemot I
Karpa I
Scotland Rk
Korovin I
Gorman Str
Unga
Unga Spit
POPOF I
Andronica I
Wedge
Castle Rk
C Thompson
UNGA I
Jude I
Wosnesenski I
Kennoys Is
Acheredin Pt
Unga C
Delarof Hbr
Falmouth Hbr
Eagle Hbr
Sealion Rks
NAGAI I
Big Koniuji I
Little Koniuji I
Atkins I
Spectacle
Turner I
Twins
Near I
Bird I
Dolgoi I
Chart 8802
SHUMAGIN

FORM C&GS-8352
(3-25-63)

NAUTICAL CHART DIVISION

RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. H-8536

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
8802	3/4/74	M. D. Kan	~~Full~~ Part ~~Before~~ After Verification ~~Review Inspection Signed Via~~
			Drawing No.
9302	3/4/74	M. D. Kan	~~Full~~ Part ~~Before~~ After Verification ~~Review Inspection Signed Via~~
			Drawing No. Applied thru Chart 8802
			Full Part Before After Verification Review Inspection Signed Via
11006	4/10/90	DM McFLINDER	Drawing No. CONSIDER ADEQUATELY APPLIED
			Full Part 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
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