8055

Diag. Cht. No. 8863-3

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. EX2553 Office No. H-8055

LOCALITY

State Alaska

General locality Aleutian Islands

Locality South side of Kanaga Island

194 53

CHIEF OF PARTY

S. B. Grenell

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DATE July 2, 1954

B-1870-1 (1)

8055

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-8055

Field No. EX-2553

State Alaska

General locality Aleutian Islands

Locality South side of Kanaga Island

Scale 1:20,000 Date of survey 8/6/53 to 8/13/53

Instructions dated 19 March 1952, 20 February 1953

Vessel USC&GSS EXPLORER

Chief of party S. B. Grenell

Surveyed by S. B. Grenell, J. C. Tison, Jr., D. M. Whipp, R. F. Lanier, J. J. Dermody

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

Fathograms scaled by fathometer readers

Fathograms checked by H. G. Conerly, D. M. Whipp, J. N. Chopy, V. Engustian, F. J. Tucker, H. A. Garcia, E. R. Stone

Protracted by J. N. Chopy (shoran), J. D. Walker (visual)

Soundings penciled by V. Engustian (shoran), J. D. Walker (visual)

Soundings in fathoms ~~feet~~ at ~~MLW~~ MLLW and are based on a velocity of sound of 800fms/sec.

REMARKS:

U. S. GOVERNMENT PRINTING OFFICE 693019

DESCRIPTIVE REPORT
to accompany
Hydrographic Sheet H-8055
Field Number EX-2553
Kanaga Island, Alaska
1953
Scale 1:20,000
USC&GSS EXPLORER S. B. Grenell, Commanding
Surveyed by: S. B. Grenell, J. C. Tison, Jr., D. M. Whipp, R. F. Lanier, J. J. Dermody

A. PROJECT

This survey was executed in accordance with the following instructions for Project CS-218:

Original Instructions dated 19 March 1952
Supplemental Instructions dated 20 February 1953

B. SURVEY LIMITS AND DATES

This survey covers the inshore hydrography on the south side of Kanaga Island from Cape Chunu east to Cape Tusik.

Date of beginning survey, 6 August 1953.
Date of ending survey, 13 August 1953.

Junctions with prior surveys: None.

Junctions with contemporary surveys:

EX-2253 (H-8053) - South of Cape Chunu.
EX-6153 (H-8056) - South limits of sheet.

C. VESSEL AND EQUIPMENT

Hydrography was done by the Ship EXPLORER and by launches operating from the ship.

All hydrography was done by 808 fathometers to the limit of their range and by EDO fathometer in deeper depths.

Fathometers used:

Ship - EDO No. 4, 808 No. 113S.
Launch No. 1 - 808 No. 49.
Launch No. 2 - 808 No. 50.
Launch No. 3 - 808 No. 60.

Hand lead and wire soundings were taken while obtaining bottom samples and on shoals.

Sounding machine No. H-117 was used by the ship for wire soundings.

D. TIDE AND CURRENT STATIONS

A portable tide gage was maintained at Cape Chunu and all tide reducers are from Cape Chunu tide data.

No time or range corrections were applied.

See tide note and list of reducers attached to this report.

There are no current stations within the area of this survey.

E. SMOOTH SHEET

The smooth sheet projection and shoran arcs were made by hand by the Seattle Processing Office.

Topographic stations for which geographic positions were computed were plotted from the computed positions by the Seattle Processing Office.

Other topographic stations were transferred direct to the smooth sheet by pricking thru ~~graphic control~~ air-photographic manuscripts T-9938 thru T-99~~40~~39 (1953) ~~1~~ (1952)

Shoreline and topographic details were transferred direct to the smooth sheet from bromoil prints of topographic manuscripts T-9938 thru T-99~~40~~39 (1953).

Shoreline and topographic details were verified in accordance with subject 757 of the Hydrographic Manual.

F. CONTROL STATIONS

Triangulation stations were established by this party in 1953.

Geographic positions of topographic stations DEN, OTT, ALE, CUB and HEP were computed from fourth-order theodolite observations.

Other topographic stations are photo-hydro stations located by photogrammetric methods on manuscripts T-9938 thru T-99~~40~~39, from 1953 field inspection data.

URN was plotted on a theodolite cut from LYRIC and in relation to other signals and shoreline.

Other hydrographic stations were located by conventional methods.

Theodolite directions were observed on some signals and are listed on lists of fourth-order directions furnished with photogrammetric data for Kanaga Island.

G. SHORELINE AND TOPOGRAPHY

Shoreline and topographic details are from photogrammetric compilation of manuscripts T-9938 thru T-9940 from 1953 field inspection data. (1952 pictures) 39

All important offshore topographic features were verified by hydrography although some of the references to features in sounding records place the feature in a slightly different position.

Important features verified by hydrography are:

Feature	Latitude	Longitude	Position No.	Launch No.
Rock awash	51-40.15	177-37.5	86g & 102g	2
Rock awash	51-41.6	177-32.6	76c	3
Rock awash	51-41.0	177-32.0	53-54f	3
Rock awash	51-41.75	177-30.95		
No mention of two rocks 250 meters north.				
Rock awash	51-43.05	177-26.0	69a	3
Rock awash	51-42.9	177-25.4	53-54a	3
No mention of rocks 200 meters east.				
Rock awash	51-42.1	177-20.1	105a	2
See also theodolite cuts.				
Rock awash	51-42.8	177-20.8	153a & 23b	2
See also theodolite cuts.				
Rock awash	Signal HIM	located by theodolite cuts.		
94-foot rock	Sentry Rock - Station SPICA, 1953.			

Topographic features located by hydrography and not on manuscript are:

Rock awash	51-41.95	177-19.0	23a	2
Rock awash	51-42.75	177.20.5	23b	2

A rock awash at 51.43.2, 177-24.9 was not verified by hydrography.

The rock referred to on Pos. 75a, Launch #2 is shown as a rock awash on the manuscript. There is a 10-foot rock 50 meters south of the position. generalized reference on hydro. - topo delineation adequate

All offshore signals are on rocks except FID which is on a dead whale and is temporary.

Kelp areas are defined by hydrography.

The low-water line was not defined by soundings. In some areas the low-water line coincides with the ledge or reef line and is defined on shoreline manuscripts. A fringe of kelp along rocky shoreline, breakers on beaches and steep foreshore of ledges prevented sounding into the low-water line.

Shoreline on the boat sheets was transferred from bromoil prints of preliminary manuscripts RS-444 and RS-490. (Also see PG, pg. 3)

H. SOUNDINGS

All sounding on sounding lines was measured with echo sounding equipment listed in par. C. Hand lead or wire soundings were obtained on shoals or at detached positions while obtaining bottom samples.

See "Special Report on Fathometer Corrections - Ship EXPLORER - 1953." Sp. Rept. #159 in Library

I. CONTROL OF HYDROGRAPHY

Hydrography was controlled by visual sextant fixes on shore signals and by shoran.

Shoran control using stations SIX, DEN and OTT was used for all ship hydrography and for launch hydrography south of Cape Chunu and south of Station LYRIC. Inshore hydrography was controlled by visual sextant fixes on shore signals.

The line separating the two methods of control runs approximately as follows:

From 51°-39.0′, 177°-39.3′ northeasterly to 51°-40.2′, 177°-35.2′, thence easterly to 51°-40.2′, 177°-29.7′, thence northeasterly to 51°-42.4′, 177°-22.6′, thence southeasterly to 51°-41.6′, 177°-20.5′, thence northeasterly to 51°-41.9′, 177°-19.9′ at east edge of sheet.

South of this line is shoran control and north of it visual control.

J. ADEQUACY OF SURVEY

The survey is considered complete and adequate for charting and complies with the Project Instructions and the Hydrographic Manual except for further development of the 50-fm. curve in vicinity of 51°-~~40~~ 39 to 51°-41.0′, 177°-18′ to 177°-19′. This will be done on an adjoining survey in 1954. TP 3 of Review

Junctions with adjoining surveys are satisfactory and depth curves can be adequately drawn. TP 4 Review

There is no survey joining this survey on the north east.
H-8140 (1954) joins H-8055 on southeast.

There are no holidays.

No time was spent developing unimportant shoals.

K. CROSSLINES

Crosslines represent about 8% of the regular system of sounding lines.

There are no large discrepancies at crossings and depth curves can be adequately drawn.

L. COMPARISON WITH PRIOR SURVEYS

The only prior surveys within the area of this survey is reconnaissance survey H-6778 (1943)- one east-west line between latitudes 51°-38' and 51°-39' and one line of H-7049 (1945) across the southeast corner.

From the west edge of the sheet to about longitude 177°-27' soundings on H-6778 are in close agreement with this survey. Continuing eastward it appears that soundings on H-6778 are displaced to the west. This may be all or partly caused by the erroneous position of Station PYLAK, 1943. TP5 Review

Soundings on H-7049 are not in agreement with this survey and seem to be displaced southward which may also be caused by PYLAK, 1943. TP5 Review

No items for investigation appear on Preliminary Review of Chart 8863 in the area of this survey.

M. COMPARISON WITH CHART

Comparisons were made with the following charts:

Chart 9145, print date 8/13/51.
Chart 8863, print date 1/14/52. TP6 Review

One approximately east-west line of soundings between 51°-38' and 51°-39' on both charts is from H-6778. See par. L.

Another approximate east-west line between 51°-36' and 51°-37.5' is a line marked "Derickson 1944" on Preliminary Review of Chart 8863. Soundings on this line appear to be displaced to the east. Shifting this line west would result in closer agreement with this survey. The 68-fm. sounding at 51°-37.5' 177°18.2' appears to be in error 100 fms. TP6 Review

Scattered sounding on Charts 9145 and 8863 not on the above mentioned lines are very erratic with most of them considerably shoaler than this survey. Most of the scattered soundings on Chart 9145, within the area of this survey, do not appear on Chart 8863. TP6 Review

A 27-fm. sounding at 51°-39.7', 177°-30.0 on Chart 9145 is about 20 fms. shoaler than this survey. A 40-fm. sounding at 51°-38.9', 177°-30.6' on Chart 9145 is about 6 fms. shoaler than this survey. Two identical soundings on Chart 8863 and apparently the same soundings as the foregoing are charted about 1 mile north of the charted positions on Chart 9145. These soundings agree closer with this survey at the charted positions on Chart 8863 but still appear to be too far south. TPG Review

The 40-fm. sounding at 51°-41.2', 177°-23.6' and the 50-fm. sounding at 51°-40.0', 177°-24.25' appear to be charted about 1/2 mile too far south. TPG Review

It is recommended that this survey supersede all charted soundings, including those on prior surveys, in the common area.

Shoreline and topographic details on charts 9145 and 8863 are superseded by more detailed compilation from 1953 field inspection data. All critical charted features were verified except in detail.

N. DANGERS AND SHOALS

The entire shoreline is foul with offlying rocks and kelp except for the clean sand beach at the head of Chunu Bay.

Limiting dangers covered by this survey are:

Latitude	Longitude	Feature or depth	Pos. No.	Launch No.
Scattered rocks awash off southeast point of Cape Chunu from T-9938.				
51-39.6	177-37.7	Bare rocks and rocks awash		T-9938
51-40.15	177-37.5	Rock awash		T-9938
51-40.45	177-37.75	Rock awash		T-9938
51-40.657	177-37.45	1.6 fms.	96g	2
51-40.8	177-37.7	Bare rocks and rocks awash		T-9938
South and east of JAM		Bare rocks and rocks awash		T-9938
51-41.8	177-37.6	Rock awash		T-9938
51-41.23	177.36.5	2.6 fms.	48f	2
51-41.8	177.36.3	Rock awash		T-9938
51-41.25	177-34.05	~~1.5~~ fms. Revised to 3.7 fms	98-99d	3
51-41.6	177-32.6	Rocks awash		T-9938
51-41.03'	177.32.01	Rock awash		T-9938
51-41.7	177-31.3	Extensive shoal area with breakers		
51-41.5	177-30.7~~1~~8	~~1.7~~ fms. Revised to 2.9 fms	31-32e	3
Sentry Rock at Station SPICA, 1953 and generally shoal area inshore from rock.				
51-41.35	177-28.55	~~3.4~~ fms. Revised to 6.1 fms	190-191a	3
51-41.6	177.28.7	Rocks awash		T-9939

Latitude	Longitude	Feature or depth	Pos. No.	Launch No.
Rocks awash and bare rocks in vicinity of LET, T-9939.				
51-43.1	177-26.9	Rock awash		T-9939
51-42.767	177-25.80	~~1.4~~ fms. Revised to 4.6 fms	141-142b	3
51-43.05	177-26.0	Rocks awash		T-9939
51-42.9	177-25.3	Rocks awash		T-9939
51-43.55	177-23.8	Rocks awash		T-9939
51-43.7	177-23.1	Rock awash		T-9939
51-43.15	177-21.8	Rock awash (HIM)		T-9939
51-43.5	177-21.8	Rock awash		T-9939
51-42.9	177-21.8	1.0 fms.	20c	2
51.42.8	177-20.8	Rock awash		T-9939
51-42.827	177-20.858	1.4 fms (H.L.)	85a	2
51-42.1	177-20.1	Rock awash		T-9939
51-41.3	177-19.7	Rocks awash		T-9940
51-40.7	177-19.7	~~2.5~~ fms. Revised to 3.3 fms	86b	1

Other offshore shoals are:

Latitude	Longitude	Feature	Pos. No.	Launch No.
51-38.80	177-39.13	4.8 Revised to 4.8 fms	70-71h	2
51-38.659	177-38.42	~~8.7~~ Revised to 4.9 fms	79.80h	2
51-39.83	177-37.40	~~4.6~~ Revised to 7.7 fms	166-167f	2
51-40.362	177-36.42	~~5.0~~ Revised to 6 fms	183-184g	2
51-40.3	177-36.7	10.0	5 & 6h	2
51-40.827	177-37.325	~~5.7~~ Revised to 8.2 fms	156,157f	2
51-40.218	177-35.0	16.0	69e	2
51-41.1	177-34.55	5.2	27-28d	3
51-40.80	177-34.105	9.7	46-47d	3
51-41.20	177-31.438	~~9.1~~ Revised to 14 fms	17-18f	3
51-40.987	177-28.988	10.8	54g	3
51-42.7	177-26.15	~~5.4~~ Revised to 6.2 fms	146f	3
51-43.053	177-23.85	9.8	142-143c	2
51-43.437	177-23.435	8.8	156.157c	2
51-40.547	177-19.85	6.9	81.82b	1
51-43.760	177-23.42	3.8	127-128c	2
51-40.205	177-20.6	16.0	130-131A	Ship
			33-34b	1
51-40.207	177-28.60	31.0	214-215B	Ship
51-42.55	177-20.55	5.0	134-135a	2

O. COAST PILOT INFORMATION

See "Coast Pilot Notes - U. S. Coast Pilot - Alaska Part II - Yakutat Bay to Arctic Ocean - Ship EXPLORER - 1953."

During the survey the ship anchored in Chunu Bay and south of Signal HIM. Neither of these anchorages is recommended as a suitable ship anchorage.

The launches anchored as follows:

In cove at 51°-39.75', 177°-38.25'
In cove between EEL and HOB off KEY
In cove at 51-42.4, 177-31.0
In cove at 51-43.7, 177-24.8
In cove at 51-43.8, 177-21.8
In cove at 51-42.2, 177-19.2

Any of these anchorages are suitable launch anchorages in northerly weather.

P. AIDS TO NAVIGATION

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

There are no bridges, overhead or submerged cables or ferry routes within the area of this survey.

Q. LANDMARKS FOR CHARTS

The only landmarks are natural objects such as rocks or peaks and cabins. None are recommended specifically as landmarks but should be charted by symbol and labeled.

R. GEOGRAPHIC NAMES

See "Special Report on Geographic Names - Tanaga and Kanaga Islands - USC&GSS EXPLORER - Season 1953".

Z. TABULATION OF APPLICABLE DATA

Forwarded with this report:

Smooth Sheet H-8055
3 Boat Sheets - EX-2553, EX-2553A, EX-2553B.
12 Sounding Volumes
1 tracing of junction survey H-8056 (1953).
Fathograms
Shoran Plotting Abstracts

Data forwarded separately:

1. Field Inspection Report - Maps T-9932, T-9937 (part) thru T-9939 - Kanaga Island, Alaska - Ship EXPLORER - 1953, including data listed therein, forwarded to Washington office 18 November 1953.

2. Triangulation data - 1953 season - forwarded to Washington office 7 December 1953.

3. Tide Data - Cape Chunu tide gage - forwarded to Washington office 14 September 1953.

Spec. Rept #158 - Library

4. Special Report on Shoran - Ship EXPLORER - 1953, forwarded to Washington office 25 March 1954.

Spec. Rept. #159 - Library

5. Special Report on Fathometer Corrections - Ship EXPLORER - 1953 forwarded to Washington office 25 March 1954.

6. Special Report on Geographic Names - Tanaga and Kanaga Islands - 1953, forwarded to Washington office 30 November 1953.

7. Coast Pilot Notes - U. S. Coast Pilot - Alaska Part II - Yakutat Bay to Arctic Ocean - Ship EXPLORER - 1953, forwarded to Washington office 27 November 1953.

8. Geographic positions of DEN and OTT forwarded to Washington office with H-8056 (1953).

Additional applicable data:

Topographic manuscripts T-9938 thru T-9940 compiled from 1953 field inspection data.

Seamen Pilot 123/1953 Library

Respectfully submitted

Charles W. Clark

Charles W. Clark
Commander, USC&GS

STATISTICS
For Hydrographic Survey H-8057 (1953)
Field No. EX-2553
Ship EXPLORER
Project CS-218

Vol. No.	Day Letter	Launch No.	Date	No. H.L. or Wire Soundings	No. Pos.	Stat. Miles of Sounding Lines
1	a	2	8/6/53	-	170	31.0
1	b	2	8/7/53	-	97	16.9
1 & 3	c	2	8/8/63	-	160	32.4
2	a	3	8/6/53	-	230	38.2
2 & 4	b	3	8/7/53	-	186	40.8
3	d	2	8/9/53	-	131	22.0
3 & 5	e	2	8/10/53	-	111	24.6
4	c	3	8/8/53	-	105	16.1
4 & 6	d	3	8/9/53	3	155	27.8
5	f	2	8/11/53	-	169	34.5
5 & 8	g	2	8/12/53	-	186	33.6
6	e	3	8/10/53	1	50	8.1
6 & 9	f	3	8/11/53	3	205	37.4
7	a	1	8/9/53	-	40	14.2
7 & 8	b	1	8/10/53	-	99	19.4
7 & 8	c	1	8/11/53	-	95	30.6
8	h	2	8/13/53	11	99	21.0
9	g	3	8/12/53	1	75	7.2
10	A	Ship	8/7/53	-	182	89.8
10 & 11	B	Ship	8/8/53	-	223	142.4
11 & 12	C	Ship	8/11/53	-	49	31.6
12	D	Ship	8/12/53	24	54	17.6
12	E	Ship	8/13/53	7	7	--
Totals:						
12				50	2875	737.2

Area: 110 square staute miles

TIDAL NOTE
To Accompany
Hydrographic Sheet (Field No. EX-2553) Reg. No. H-8055

For tide reducers on the sheet a gage was maintained at Cape Chunu, Kanaga Island, Lat. 51-39.9, Long. 177-38.1. No correction was applied for distance from the gage.

MLLW on the staff was 1.7 ft.

Tide Reducers
for
Hydrographic Sheet Field No. EX-2553
Reg. No. H-8055

Date	Units Working	Tide Reducers	
Aug. 6	Launches No. 2 and 3.	+0.1 fm	0630-0830
		0.0 fm	0830-0915
		-0.1 fm	0915-1000
		-0.2 fm	1000-1043
		-0.3 fm	1043-1127
		-0.4 fm	1127-1222
		-0.5 fm	1222-1327
		-0.6 fm	1327-1635
		-0.7 fm	1635-2100
		-0.8 fm	2100-2323
Aug. 7	Ship, Launches No. 2 and 3.	+0.1 fm	0530-0845
		0.0 fm	0845-0945
		-0.1 fm	0945-1033
		-0.2 fm	1033-1115
		-0.3 fm	1115-1200
		-0.4 fm	1200-1300
		-0.5 fm	1300-1410
		-0.6 fm	1410-2010
Aug. 8	Ship, Launches No. 2 and 3.	+0.1 fm	0640-0927
		0.0 fm	0927-1032
		-0.1 fm	1032-1124
		-0.2 fm	1124-1207
		-0.3 fm	1207-1255
		-0.4 fm	1255-1353
		-0.5 fm	1353-1520
		-0.6 fm	1520-2300
Aug. 9	Launches No. 1, 2 and 3.	+0.1 fm	0710-0935
		0.0 fm	0935-1047
		-0.1 fm	1047-1140
		-0.2 fm	1140-1227
		-0.3 fm	1227-1316
		-0.4 fm	1316-1407
		-0.5 fm	1407-2130

Date	Units Working	Tide Reducers	
Aug. 10	Ship, Launches No. 1, 2 and 3.	0.0 fm	0647-1040
		-0.1 fm	1040-1140
		-0.2 fm	1140-1236
		-0.3 fm	1236-1327
		-0.4 fm	1327-1423
		-0.5 fm	1423-2317
Aug. 11	Launches No. 1, 2 and 3.	-0.1 fm	0720-1133
		-0.2 fm	1133-1226
		-0.3 fm	1226-1327
		-0.4 fm	1327-1443
		-0.5 fm	1443-1950
Aug. 12	Ship, Launches No. 2 and 3.	-0.1 fm	0805-1100
		-0.2 fm	1100-1222
		-0.3 fm	1222-1324
		-0.4 fm	1324-1440
		-0.5 fm	1440-1926
Aug. 13	Ship and Launch No. 2.	-0.3 fm	0650-0830
		-0.2 fm	0830-1126
		-0.3 fm	1126-1300
		-0.4 fm	1300-1422
		-0.5 fm	1422-1552
		-0.6 fm	1552-1836
		-0.5 fm	1836-2027

GEOGRAPHIC NAMES

Charted Names

PACIFIC OCEAN
KANAGA ISLAND
CAPE CHUNU
ROUND POINT

New names recommended in Special Report on Geographic Names - Tanaga and Kanaga Islands - USC&GSS EXPLORER - 1953.

CHUNU BAY
SENTRY ROCK

APPROVAL SHEET

HYDROGRAPHIC SURVEY NO. H-8055

The smooth sheet, sounding volumes, fathograms and descriptive report have been examined and are approved.

Hydrography done by the ship was under almost constant supervision of the Chief of Party. Launch hydrography was done by launches operating from the ship and boat sheets were examined almost daily by the Chief of Party.

No additional field work is recommended except further development of the 50-fathom curve in the vicinity of 51°-~~40'~~ 39' to 51°-~~42'~~ 39' and 177°-18' to 177°-19'. This will be done on an adjoining survey in 1954. TP 3 & 9 Review

S. B. Grenell
Commander, USC&GS
Comdg. Ship EXPLORER

H-8055
Ex-2553

South side of Kanaga Island

Processing Office Notes.

The following work on this sheet was done in the Seattle Processing Office. Geographic names, kelp symbols and foul area notes were penciled on the smooth sheet. Also rocks, bare and awash, from hydrographic records were checked and other work incidental to the completion of the sheet. In checking thru the record books three notes were made as follows.

Ø 51° 43!75 λ 177° 24'.35 Positions 33 to 35a launch 3. A line is shown thru a rock patch, of which there is no mention in the sounding record. The line appears to pass over a 4' bare rock. Plotted in harmony with topography.

Ø 51° 41'.0 λ 177° 32'.0 A photo located rock awash does not agree with the hydrographic location of what is believed to the same rock. See volume 6 launch 3 positions 59d, 24f,53f ,65f and 75f. Hydro. location accepted

Ø 51° 40'.62 λ 177° 36'.40 Launch 2 positions 169 to 170g. A shoal 4.5 fm. sounding, rejected as possible kelp was changed by rescanning and put on the sheet as ~~5.1~~ 6 fathoms.

6

Glenn W. Moore
Commander USC&GS.

GEOGRAPHIC NAMES

Survey No. H-8055

Name on Survey	A On Chart No.	B On previous survey No.	C On U. S. quadrangle Maps	D From local information	E On local Maps	F P. O. Guide or Map	G Rand McNally Atlas	H U. S. Light List	K	
Alaska			{for title}							1
Aleutian Islands										2
										3
Kanaga Island									B.GN	4
Cape Chunu			(tide station)							5
Chunu Bay										6
Round Point										7
Sentry Rock										8
Pacific Ocean										9
										10
					Names approved					11
					7-7-54. L. Heck					12
										13
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M 234

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. H-8055

Records accompanying survey:

Boat sheets 3; sounding vols. 12; wire drag vols. .....;

bomb vols. .....; graphic recorder rolls 4 Env.;

special reports, etc. 1 Smooth Sheet; 1 Descriptive Report; 1 Cahier- Shoran

Abstracts: .....

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

Number of positions on sheet		2875
Number of positions checked		67
Number of positions revised		9
Number of soundings revised (refers to depth only)		93
Number of soundings erroneously spaced		3
Number of signals erroneously plotted or transferred		0
Topographic details	Time	24
Junctions	Time	16
Verification of soundings from graphic record	Time	.....

Verification by O. Svendsen ..... Total time 190 Date 6-7-56

Reviewed by ..... Time 46 Date 8-31-56

M-2232-1

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-8055 FIELD NO. EX-2553

Alaska - Aleutian Islands, South Side of Kanaga Island

Project No. CS-218

Surveyed - August, 1953 Scale 1:20,000

Soundings:

808 Fathometer
Edo Fathometer

Control:

Shoran
Sextant fixes on shore signals

Chief of Party - S. B. Grenell
Surveyed by - S. B. Grenell, J. C. Tison, Jr., D. N. Whipp
R. F. Lanier, and J. J. Dermody
Protracted by - J. N. Chopy and J. D. Walker
Soundings plotted by - V. Engustian and J. D. Walker
Verified and inked by - O. Svendsen
Reviewed by - I. M. Zeskind 8-31-56
Inspected by - R. H. Carstens

1. Shoreline and Control

The shoreline originates with reviewed air-photographic surveys T-9938 and T-9939 of 1952-53.

The source of the control is given in the Descriptive Report.

2. Sounding Line Crossings

The sounding line crossings are in good agreement.

3. Depth Curves and Bottom Configuration

The usual depth curves were adequately delineated, except close inshore where the foul areas and inshore dangers generally prevented development to the low-water line, and in the vicinity of lat. 51°39.5', long. 177°18.5', where further development of the 50-fm. curve was to be accomplished in 1954. (See paragraph J of Descriptive Report.)

This survey covers the island shelf and slope on the south side of Kanaga Island and extends to depths of as much as 400 fms. The bottom is very irregular on the island shelf

to approximate depths of 40 fms., and fairly irregular on the island slope in greater depths. Submarine features such as reefs, ledges, pinnacles, shoals and troughs contribute to the bottom irregularity.

4. Junctions with Contemporary Surveys

Adequate junctions were effected with H-8053 (1953) on the west, with H-8056 (1953) on the south and with H-8140 (1954) on the southeast. The project survey on the northeast has not yet been received in the Washington Office.

5. Comparison with Prior Surveys

H-6778 (1943), 1:120,000
H-7049 (1945), 1:160,000

Two sounding lines from these prior small-scale reconnaissance surveys fall in the southern portion of the present survey. A comparison between the prior and present surveys reveals that prior depths in the eastern portion of the present survey are out of position as much as one-half mile. Elsewhere the prior and present depths are in adequate agreement. The error in position of the prior soundings is attributed to faulty control.

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

6. Comparison with Chart 8863 (latest print date 1-14-52)
Chart 9145 (latest print date 6-11-56)

A. Hydrography

Chart 8863

The hydrography on Chart 8863 originates with the previously discussed prior surveys, with trackline surveys of the Ship DERICKSON in 1944 (Bp. 38924) and the U. S. Navy in 1934-35 (Bp. 36697) and with several soundings from miscellaneous sources not readily ascertainable. Differences of as much as 100 fms. between the charted and present survey depths are noted. These differences in depths are attributed to faulty control on the trackline surveys.

The 68-fm. sounding charted in lat. 51°37.3', long. 177°18.2', from the U. S. Navy trackline of 1934-35 (Bp. 36697), falls in present depths of 137 - 160 fms. The charted sounding is considered to be 100 fms. in error and should be deleted from the chart.

The present survey is adequate to supersede the charted hydrography within the common area.

Chart 9145

The hydrography on Chart 9145 originates with the present survey prior to verification and review. Only minor differences are generally noted between the prior and present survey depths, except in the kelp areas where differences in depths of as much as 4 fms. are found. These latter differences in depth were caused by revisions resulting from faulty interpretation of the fathograms; the kelp trace was frequently misread for the bottom trace. The following is a list of the critical charted soundings which have been revised on the present survey during verification and review:

Charted depth		Chart location		Revised depth
fms.	ft.	Latitude	Longitude	fms.
8	2	51°40.87'	177°36.40'	10.3
0	5	51°41.70'	177°30.80'	4.9
4	5	51°41.50'	177°30.80'	5.5
1	3	51°41.38'	177°29.60'	5.8
0	5	51°41.55'	177°29.10'	3.2
1	2	51°42.65'	177°25.82'	4.6
2	0	51°42.83'	177°25.82'	4.6
6	2	51°42.70'	177°25.50'	7.2
1	3	51°42.80'	177°25.48'	5.6
4	3	51°42.93'	177°25.00'	7.5

The 3 fms. 5 ft. sounding charted in lat. 51°41.05', long. 177°38.0' from the present survey is in error. The shoalest depth in this area is 55 fms. 5.5 RKD

Attention is also directed to the following discrepancies between the chart and the present survey:

1. The rock awash shown on chart 9145 lat. 51°39.7', long. 177°38.1' is charted in error. The feature is not shown on contemporary air-photographic survey T-9938 (1952-53) or the photographs from which T-9939 was compiled. An examination of the boat sheet and the sounding records also fails to reveal any indication of the feature. The rock awash should be deleted from the chart.

2. The rock awash charted in lat. 51°42.82', long. 177° 27.20', from air-photographic survey T-9939 (1952-53), falling in depths of 5 - 8.8 fms. is non-existent and should be deleted from the chart. The photographs covering the area were re-examined and no indication of the rock awash was noted.

3. A portion of ledge shown on air-photographic survey T-9939 (1952-53) and the present survey in lat. 51°43.57', long. 177°26.50' has not been charted.

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 area of the present survey.

7. Condition of Survey

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

b. The smooth-plotting was accurately done.

c. It was necessary to revise a number of soundings during the verification of the smooth sheet because the kelp trace was frequently misread for the bottom trace on the fathograms.

8. Compliance with Project Instructions

The survey adequately complies with the Project Instructions, except as noted in paragraph 3 above.

9. Additional Field Work Recommended

The survey is considered basic and no additional field work is recommended. However, attention is directed to the further development of the 50-fm. curve in the vicinity of lat. 51°39.5', long. 177°18.5', which is to be accomplished on the adjoining H-8144 survey in 1954 (see paragraph 3 above.). Also, as a matter of record, it is noted that the irregular bottom area between the 5-and 20-fm. curves south of Cape Chunu is not completely developed by the widely spaced lines run in that area.

Examined and Approved:

H. R. Edmonston
Chief, Nautical Chart Branch

Charles A. Schanck
Chief, Chart Division

J. C. Bull
Chief, Hydrography Branch

Samuel B. Grenell
Chief, Coastal Surveys Division

839

RHC

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

TIDE NOTE FOR HYDROGRAPHIC SHEET

~~Division of Hydrography and Topography~~: 26 July 1954

Division of Charts: R. H. Carstens

Plane of reference approved in
12 volumes of sounding records for

HYDROGRAPHIC SHEET 8055

Locality Kanaga Island (South Side), Aleutian Islands

Chief of Party: S. B. Grenell in 1953
Plane of reference is mean lower low water, reading
1.7 ft. on tide staff at Cape Chunu
7.8 ft. below B. M. 1 (1953)

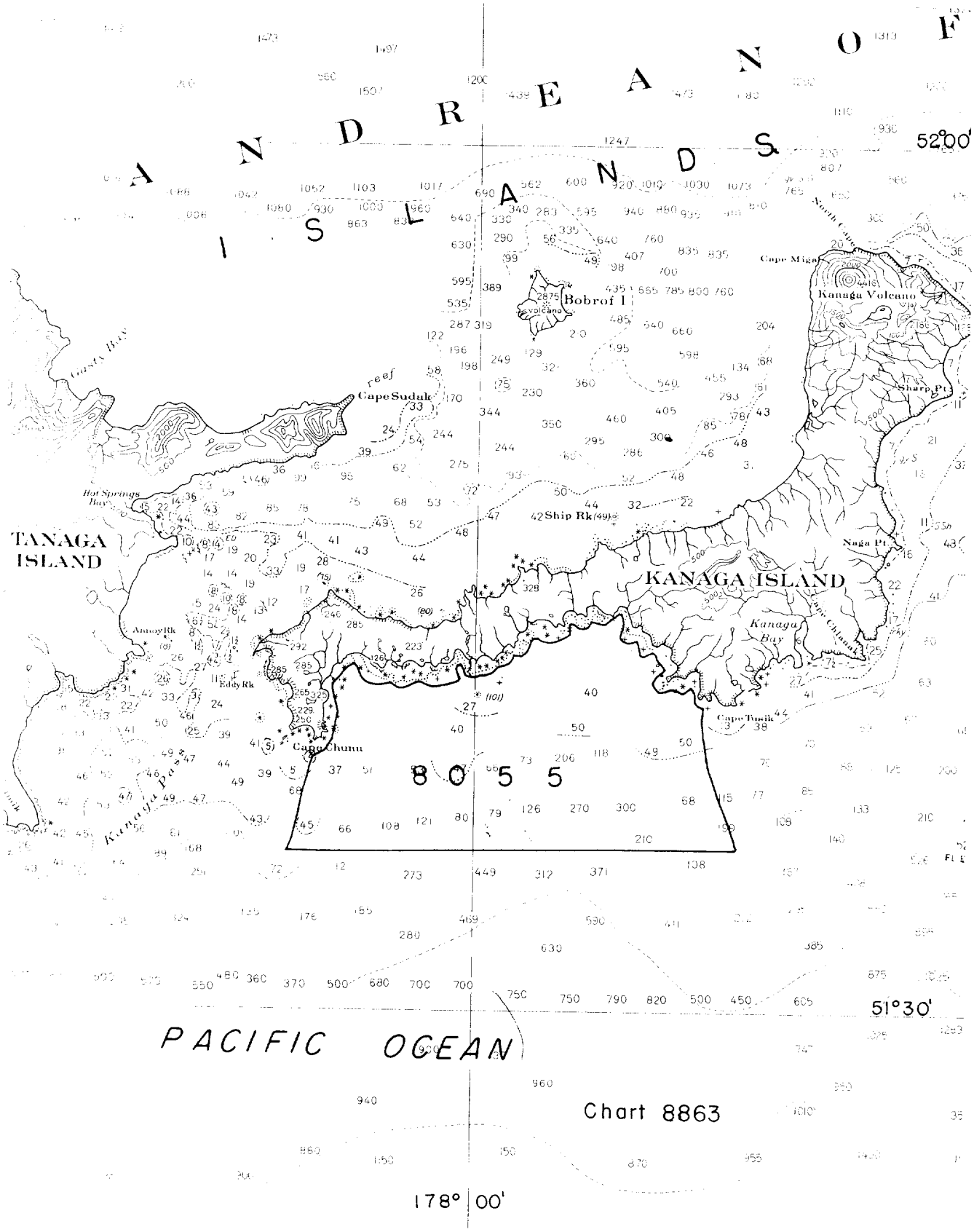
Height of mean high water above plane of reference is 4.1 feet.

Condition of records satisfactory except as noted below:

E.C. McKay
Tides Branch

Chief, Division of Tides and Currents.

U. S. GOVERNMENT PRINTING OFFICE : 756675


ANDREANOF
ISLANDS
52°00'
Bobrof I
Kanaga Volcano
Cape Miga
Cape Sudak
Sharp Pt
Hot Springs Bay
TANAGA ISLAND
Ship Rk
Naga Pt
KANAGA ISLAND
Kanaga Bay
Cape Chlanak
Annoy Rk
Eddy Rk
Cape Chunu
Cape Tusik
8055
51°30'
PACIFIC OCEAN
Chart 8863
178° 00'

NAUTICAL CHARTS BRANCH

SURVEY NO. H-8055

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
10/4/54	9145	S.Ann.	Before ~~After~~ Verification and Review
			Fully applied.
6/11/58	8863	Wittmann	~~Before~~ After Verification and Review
10-21-58	9145	R. K. McLauder	~~Before~~ After Verification and Review
12/10/92	16162	Joseph Blum	~~Before~~ After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			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.