7081

Diag. Cht. No. 8863-2

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. SU-2445 *Office No.* H-7081

LOCALITY

State Alaska - Aleutian Islands

General locality Andreanof Islands

Locality Approaches to Kanaga Pass

1945

CHIEF OF PARTY

C.D. Meaney, Commanding Ship Surveyor.

LIBRARY & ARCHIVES

DATE May 15, 1946

B-1870-1 (1)

7081

Form 537
(Ed. Nov. 1941)

REG. NO. H7081

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-7081

Field No. SU 2445

State ALASKA - Aleutian Islands

General locality Andreanof ~~ALEUTIAN~~ ISLANDS

Locality APPROACHES TO KANAGA PASS

Scale 1:20,000 Date of survey October, 1945

Instructions dated 3 February 1938

Vessel SURVEYOR

Chief of party C. D. Meaney

Surveyed by C. D. Meaney

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

Protracted by Betty B. Jones

Soundings penciled by Betty B. Jones

Soundings in fathoms ~~feet~~ at ~~MLW~~ MLLW and are true depths

REMARKS: Incompleted Survey - completed on adjacent survey H-8053
Smooth Sheet and Processing by Seattle Processing Office.

U. S. GOVERNMENT PRINTING OFFICE 428975

NOTE TO ACCOMPANY

HYDROGRAPHIC SURVEY SU-2445 7081

APPROACH TO KANAGA PASS - SOUTH PART

1945 C.S. 218

Scale: 1/20000

Chief of Party: C.D. Meaney, Commanding Ship SURVEYOR, 1945

Field work by: C.D. Meaney

A. PROJECT:

This work was executed under Instructions for Project C.S. 218 dated 3 February 1938; Supplemental Instructions dated 16 April, 1943 and 1 February 1944; Instructions issued by Capt. F.B.T. Siems dated 5 May and 28 May 1945.

complete with H-8053

B. SURVEY LIMITS AND DATES:

This is an incompleted survey and consists of parts of two days of ship hydrography in the southern approach to Kanaga Pass. The work was done October 3 and 4. Adverse weather conditions prevented further hydrography.

C. VESSELS AND EQUIPMENT:

The hydrograpy was executed from the Ship SURVEYOR using the Dorsey III fathometer with an 808 recorder for verification to obtain all depths.

D. TIDES AND CURRENTS:

All tidal data for the reduction of soundings was obtained from the portable automatic tide gage on Ogliuga Island by applying a time difference of minus one hour and a range factor of 1.2. (See Directors letter 12 December 1945).

E. SMOOTH SHEET:

To be plotted by the Seattle Processing Office.

F. CONTROL STATIONS:

Signals previously located by triangulation or topography and one signal (Cone) located by sextant cuts were used to control the hydrography.

G. SHORELINE AND TOPOGRAPHY:

To be taken from air photos compilation completed in 1944.

None applied on this off shore sheet

H. SOUNDINGS:
Standard methods were used to obtain all depths.

I. CONTROL OF HYDROGRAPHY:
All sounding lines were controled by sextant fixes.

J. ADEQUACY OF SURVEY:
Incomplete.

K. CROSSLINES:
Only one crossline run. Crossings are satisfactory.

L & M. COMPARISON WITH PRIOR SURVEYS AND CHART:
No prior surveys in the area covered.

N. DANGERS AND SHOALS:
None in the area surveyed.

O. COAST PILOT INFORMATION:
No additional information;

P. AIDS TO NAVIGATION:
None in area surveyed.

Q. LANDMARKS FOR CHARTS:
No additional.

R. GEOGRAPHIC NAMES:
To be compiled by Seattle Processing Office.

S. SILTED AREAS:
None in area surveyed.

Respectfully submitted,

Wilbur R Porter

WILBUR R. PORTER
Lt. Comdr., C. & G. Survey

APPROVED:

C.D. Meaney

C.D. MEANEY
Lt. Comdr., C. & G. Survey
Comdg. Ship SURVEYOR

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STATISTICS FOR HYDROGRAPHIC SURVEY SU-2445

Date	Vol.	Day	No. Pos.	No. Stat. Miles
10-3-45	1	A	130	65.9
10-4-45	1	B	10	4.1
		TOTAL	140	70.0

Area - 14 square miles.

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TIDE NOTE

The Ogliuga gage was used for all reducers.

Latitude	51° 36.2'N
Longitude	178° 37.0'W

Time difference - —one hour
Range factor - 1.2

See Director's Letter 36 mlh of 12/12/45
to C.O. SURVEYOR

GEOGRAPHIC NAME LIST

VELOCITY CORRECTIONS

The standard method of computing velocity corrections from the temperature, Salinity and Pressure curves was followed. These corrections have been entered and checked. A copy of the correction applied is attached.

LIST OF SIGNALS USED

NAME	ORIGIN
ANNOY ROCK	Triangulation, 1943
CHU	" "
Cone	Sextant cuts, Vol. 1
EDDY ROCK	Triangulation, 1943
FARM	" "
FOUL	" "
GOOSE	" "
MIK	" "
NEW	" "
OFF	" "
SAS	" "

South part Kanaga Pass

H-7081

SU 2445

Seattle Processing Office Notes

The Smooth Sheet is hand made on Paragon paper.

The pencilled Shoreline is transferred from H-7022. No topographic surveys have been made. The shoreline on H-7022 is from air photographs fitted between control stations without radial plot. Pencilled shoreline removed from survey - not needed

Unfinished sheet. As there has been only a small amount of work done on this sheet, it is presumed that the smooth sheet will be returned to the Processing Office for further plotting when additional field work is done. Overlapping hydrog. on H-8053 (1953) transferred to H-7081 in Wash. Office.

Boat Sheet. This is being returned to the field party. It has been compared with the smooth sheet.

Additional development is indicated by the 44 fathom sounding at 126-127 A day, Latitude 51° 38.3 Longitude 177° 49.9. This appears on the 808 fathogram as a well defined sharp rise and fall. This has been noted on the boat sheet. Add. development on H-8053 (1953).

Respectfully submitted,

Edgar P. Smith
Cartographic Engineer
Seattle Processing Office

June to October 1946

Temperature & Salinity Corrections

R.C.A. Model N.M.C.

Depth	Correction
0 to 47.5 fms.	+0.0 fms.
48 to 105 "	+0.2
106 to 112 "	+0.4
113 to 238 "	+0.5
239 to 337 "	+1.0
338 to 416 "	+1.5
417 to 485 "	+2.0
486 to 545 "	+2.5
546 to 602 "	+3.0
603 to 650 "	+3.5
651 to 700 "	+4.0
701 to 741 "	+4.5
742 to 781 "	+5.0
782 to 816 "	+5.5
817 to 855 "	+6.0
856 to 888 "	+6.5
889 to 919 "	+7.0
920 to 948 "	+7.5
949 to 975 "	+8.0
976 to 1002 "	+8.5
1003 to 1029 "	+9.0
1030 to 1056 "	+9.5
1057 to 1081 "	+10.0
1082 to 1106 "	+10.5
1107 to 1130 "	+11.0
1131 to 1154 "	+11.5
1155 to 1178 "	+12.0
1179 to 1200 "	+12.5
1200 to 1220 "	+13.0
1221 to 1300 "	+14.0
1301 to 1382 "	+16.0

R.C.A. Model N.M.C.

Depth	Correction
1383 to 1455 fms.	+18.0 fms.
1456 to 1530 "	+ 20.0
1531 to 1559 "	+ 22.0
1600 to 1650 "	+ 24.0
1651 to 1710 "	+ 26.0
1711 to 1770 "	+ 28.0
1771 to 1830 "	+ 30.0
1831 to 1890 "	+ 32.0
1891 to 1940 "	+ 34.0
1941 to 1995 "	+ 36.0
1996 to 2020 "	+ 38.0
2021 to 2140 "	+ 40.0
2141 to 2250 "	+ 45.0
2251 to 2355 "	+ 50.0
2356 to 2455 "	+ 55.0
2456 to 2555 "	+ 60.0
2556 to 2650 "	+ 65.0
2651 to 2750 "	+ 70.0
2751 to 2835 "	+ 75.0
2836 to 2920 "	+ 80.0
2921 to 3000 "	+ 85.0
3001 to 3080 "	+ 90.0
3081 to 3155 "	+ 95.0
3156 to 3235 "	+ 100.0
3236 to 3310 "	+ 105.0
3311 to 3380 "	+ 110.0
3381 to 3450 "	+ 115.0
3451 to 3540 "	+ 120.0
3541 to 3610 "	+ 125.0
3611 to 3690 "	+ 130.0
3691 to 3765 "	+ 135.0

DRAFT & INSTRUMENTAL CORRECTIONS SHIP SURVEYOR

Season - 1945 Delarof Islands In fathoms		Dorsey III Initial 2.2 Inst. error 0.1	808 Initial 2.0 Inst. error 0.0	N.M.C. Red Light Initial 2.2 Inst. error 0.1	N.M.C. Recorder Initial 0.0 Inst. error 0.1
Date	Ships Draft				
6-5	1.9	-0.2	-0.1	-0.2	+2.0
6-6	1.9	-0.2	-0.1	-0.2	+2.0
6-7	1.9	-0.2	-0.1	-0.2	+2.0
6-8	1.8	-0.3	-0.2	-0.3	+1.9
6-13	2.2	+0.1	+ 0.2	+0.1	+ 2.3
7-7	2.1	0.0	+ 0.1	0.0	+2.2
7-8	2.0	-0.1	0.0	-0.1	+2.1
7-9	2.0	-0.1	0.0	-0.1	+2.1
7-10	2.0	-0.1	0.0	-0.1	+2.1
7-11	2.0	-0.1	0.0	-0.1	+2.1
7-12	1.9	-0.2	-0.1	-0.2	+2.0
7-13	2.1	0.0	+ 0.1	0.0	+2.2
7-14	2.0	-0.1	0.0	-0.1	+2.1
7-19	1.9	-0.2	-0.1	-0.2	+2.0
7-20	2.0	-0.1	0.0	-0.1	+2.1
7-24	1.8	-0.3	-0.2	-0.3	+1.9
7-27	1.8	-0.3	-0.2	-0.3	+1.9
8-3	2.1	0.0	+ 0.1	0.0	+2.2
8-8	2.1	0.0	+ 0.1	0.0	+2.2
8-10	2.1	0.0	+ 0.1	0.0	+2.2
8-11	2.0	-0.1	0.0	-0.1	+2.1
8-13	2.0	-0.1	0.0	-0.1	+2.1
8-18	2.0	-0.1	0.0	-0.1	+2.1
8-24	2.0	-0.1	0.0	-0.1	+2.1
8-25	1.9	-0.2	-0.1	-0.2	+2.0
8-28	1.9	-0.2	-0.1	-0.2	+2.0
8-29	1.9	-0.2	-0.1	-0.2	+2.0
8-31	1.9	-0.2	-0.1	-0.2	+2.0
9-5	1.9	-0.2	-0.1	-0.2	+2.0
9-6	2.1	0.0	+ 0.1	0.0	+2.2
9-7	2.1	0.0	+ 0.1	0.0	+2.2
9-8	2.0	-0.1	0.0	-0.1	+2.1
9-10	2.0	-0.1	0.0	-0.1	+2.1
9-11	2.0	-0.1	0.0	-0.1	+2.1
9-12	2.0	-0.1	0.0	-0.1	+2.1
9-13	2.0	-0.1	0.0	-0.1	+2.1
9-14	2.0	-0.1	0.0	-0.1	+2.1
9-28	2.1	0.0	+ 0.1	0.0	+2.2
9-29	2.0	-0.1	0.0	-0.1	+2.1
10-2	1.9	-0.2	-0.1	-0.2	+2.0
10-3	1.9	-0.2	-0.1	-0.2	+2.0
10-4	1.9	-0.2	-0.1	-0.2	+2.0
10-5	1.9	-0.2	-0.1	-0.2	+2.0
10-8	1.9	-0.2	-0.1	-0.2	+2.0
10-9	1.8	-0.3	-0.2	-0.3	+1.9

South Part Kanaga Pass

H-7081

SU 2445

Geographic Names Penciled on Smooth Sheet

Tanaga Island

Kanaga Pass

Kanaga Island

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

TIDE NOTE FOR HYDROGRAPHIC SHEET

~~Division of Hydrography and Topography~~: June 10, 1946

Division of Charts: H. W. MURRAY

Plane of reference approved in
1 volume of sounding records for

HYDROGRAPHIC SHEET 7081

Locality South end of Kanaga Pass, Aleutian Islands, Alaska

Chief of Party: C. D. Meaney in 1945
Plane of reference is mean lower low water, reading
3.8 ft. on tide staff at Ogliuga Island
4.7 ft. below B. M. 1

Height of mean high water above plane of reference is 3.5 feet.

Condition of records satisfactory except as noted below:

E. C. McKay
Section
Chief, ~~Division~~ of Tides ~~and Currents.~~

U. S. GOVERNMENT PRINTING OFFICE 154327

GEOGRAPHIC NAMES

Survey No. H7081

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	
										1
										2
										3
										4
										5
										6
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										25
										26
										27

M 234

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. ..H7081

Records accompanying survey:

Boat sheets .....; sounding vols. .1...; wire drag vols. .....;
(returned to field)

bomb vols. .....; graphic recorder rolls .1...;

special reports, etc. .....

.....

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

Number of positions on sheet		140
Number of positions checked		24
Number of positions revised		3
Number of soundings revised (refers to depth only)		1
Number of soundings erroneously spaced		15
Number of signals erroneously plotted or transferred		0
Topographic details	Time	0
Junctions	Time	0
Verification of soundings from graphic record	Time	1 Hr.

Verification by F. J. ORTIZ ..... Total time 16 Hrs. Date 6/18/46

Reviewed by G. F. Jordan ..... Time 1 hr. Date 7/19/46
G. M. Zeskind 10 hr. 10-13-55

M-2232-1

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-7081 FIELD NO SU-2445

Alaska, Aleutian Islands, Andreanof Islands, Approaches to Kanaga Pass

Project No. CS-218

Surveyed, October, 1945 Scale 1:20,000

Soundings: Control:

Dorsey III Fathometer
808 Fathometer

Sextant fixes on shore signals

Chief of Party - C. D. Meaney
Surveyed by - C. D. Meaney, R. C. Rowse, F. Natella, W. R. Porter, and H. O. Fortin
Protracted by - B. B. Jones
Soundings plotted by - B. B. Jones
Verified and inked by - F. J. Ortiz
Reviewed by - I. M. Zeskind 10-13-55
Inspected by - R. H. Carstens

The basic development of this area is completed by soundings transferred from H-8053 (1953) and the Review is now submitted.

1. Shoreline and Control

No shoreline is shown on this offshore survey.

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

2. Sounding Line Crossings

Depths at crossings are in adequate agreement.

3. Depth curves and Bottom Configuration

The usual depth curves are adequately delineated.

The bottom is generally smooth, except in the northern and eastern portions of the survey where shoals and ridges contribute to the bottom irregularity.

4. Junctions with Contemporary Surveys

An adequate junction was effected with H-8053 (1953) on the north and east. The junction with H-8051 (1953) on the west is deferred pending the completion of the inking of that survey. The junction with H-8056 (1953) on the south will be considered in the review of that survey.

5. Comparison with Prior Surveys

H-6908 (1942) (U. S. Navy Recon.), 1:20,000
H-6778 (1943-45), 1:120,000

These reconnaissance surveys fall within the area of the present survey. A comparison between H-6908 and the present survey reveals differences in depth of as much as 10 fms. As for example in lat. 51°39.39', long. 177°47.90', where a prior depth of 47 fms. falls in present depths of 56-57 fms. These differences in depths are attributed to deficiencies in survey H-6908, such as faulty fathometer soundings and weak horizontal control as evidenced by discrepancies at crossings of as much as 6 fms. on that survey. About 10 soundings on one line of soundings on H-6778 fall within the area of the present survey. Minor differences of 1-2 fms. in depths between survey H-6778 and the present survey are noted.

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

6. Comparison with Chart

Chart Drawing 9145 dated Oct., 17, 1955

A. Hydrography

The charted hydrography originates with the following surveys prior to verification and review: The present survey, H-8053 (1953), and H-8051 (1953). The charted hydrography is in adequate agreement with the present survey.

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) Only one bottom characteristic was obtained in the area.

8. Compliance with Project Instructions

With the addition of the overlapping hydrography of H-8053 (1953), the present survey adequately complies with the Project Instructions, except for the lack of bottom characteristics mentioned in paragraph (c) above.

9. Additional Field Work Recommended

With the addition of the supplemental soundings from H-8053, the present survey is considered basic and no additional field work is recommended. As a matter of record, attention is called to the lack of bottom characteristics obtained in the area of the present survey as mentioned in paragraphs 7c and 8 above.

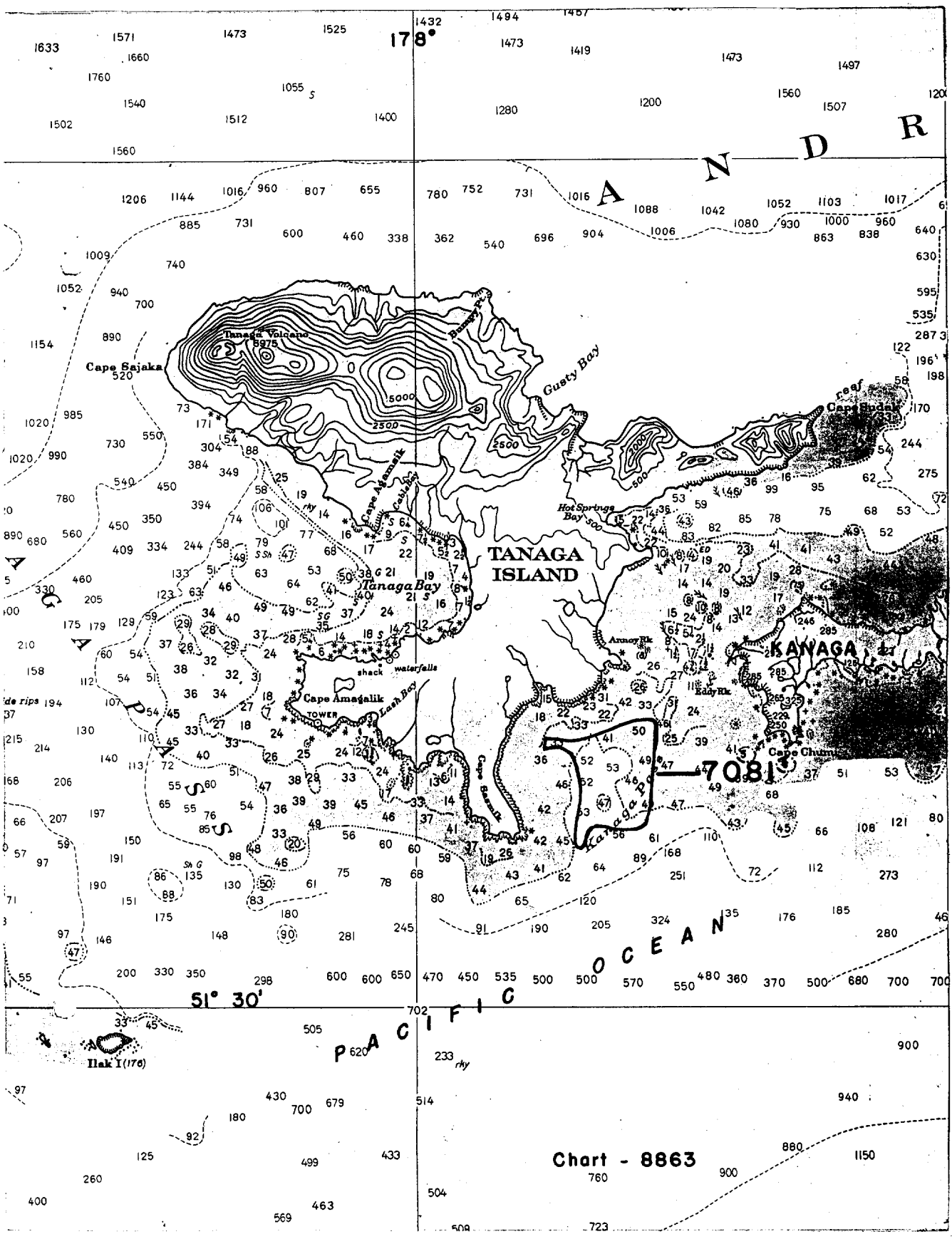
Examined and Approved:

H. R. Edmonston
Chief, Nautical Chart Branch

E. R. McCarthy
Chief, Chart Division

J. C. Bull
Chief, Hydrography Branch

Earl O. Heaton
Chief, Division of Coastal Surveys


178°
Tanaga Volcano
5975
Cape Sajaka
Bowers Ridge
Gusty Bay
Cape Adamek
Cable Bay
Tanaga Bay
TANAGA ISLAND
Hot Springs Bay
Reef
Cape Sindak
Armory Rk.
Eddy Rk.
Cape Amagalik
TOWER
Lash Bay
shack
waterfalls
Cape Saanich
Tanaga Pass
7081
Cape Chum
51° 30'
Ilak I (176)
PACIFIC OCEAN
Chart - 8863

NAUTICAL CHARTS BRANCH

SURVEY NO. H7081

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
9-25-46	8863	D.H.B. J.M.A.	~~Before~~ After Verification and Review Survey incomplete Examined for critical soys. Make slight addition to 50 fth. curve
			Before After Verification and Review
10/8/47	9146	J.A.M.	Survey incomplete, partially applied.
			Before After Verification and Review
4/19/48	9145	J.A. McGann	Before After Verification and Review Survey incomplete, partially applied.
11-17-55	9145	J.P. Walker	~~Before~~ After Verification and Review Completely
9/5/56	9146 prem	HSA	~~Before~~ After Verification and Review No correction - outside of survey area
Recent 8863	12/1/58	JPW	~~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.