

8052

Diag. Cht. No. 8863-3

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. EX-2253 Office No. H-8052

LOCALITY

State Alaska - Aleutian Islands

General locality Andreanof Islands

Locality West Side Tanaga Island

194 53

CHIEF OF PARTY

S. B. Grenell

LIBRARY & ARCHIVES

DATE March 19, 1954

8052

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-8052

Field No. EX-2253

State Alaska - Aleutian Islands

General locality Andreanof  
Aleutian Islands

Locality West and North sides of Tanaga Island

Scale 1:20,000 Date of survey 4 June to 17 July 1953

Instructions dated 19 March 1952, 20 February 1953, 5 August 1952.

Vessel USC&GSS EXPLORER

Chief of party S. B. Grenell

Surveyed by D. M. Whipp, R. F. Lanier, J. J. Dermody

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

Fathograms scaled by Fathometer operators

Fathograms checked by D. M. Whipp, J. N. Chopy, V. E. Engustian, H. A. Garcia,  
J. J. Dermody, F. J. Tucker

Protracted by J. N. Chopy

Soundings penciled by J. N. Chopy

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

REMARKS: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

242

DESCRIPTIVE REPORT  
to accompany  
Hydrographic Sheet H-8052  
Field Number EX-2253  
Tanaga Island, Alaska  
1953  
Scale 1:20,000  
USC&GSS EXPLORER, S. B. Grenell, Commanding

Surveyed by: 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
- Modification of instructions dated 5 August 1952

B. SURVEY LIMITS AND DATES

This survey covers the inshore hydrography on the west and north sides of Tanaga Island, extending northwestward from Cape Agamsik around Cape Sajaka and east to Longitude 178-01-30.

Date of beginning survey, 4 June 1953  
Date of ending survey - 17 July 1953

Junctions with prior surveys:

- ✓ H-7005 (1944) Scale 1:10,000, Cape Agamsik
- ✓ H-7023 (1944) Scale 1:40,000, Tanaga Bay
- ✓ H-7026 (1944) Scale 1:20,000, Tanaga Bay
- ✓ H-7977 (1952) Scale 1:100,000, south of Cape Sajaka

Junctions with contemporary surveys:

- ✓ EX-2453 (H-8054) Easterly limit of sheet
- ✓ EX-6253 (H-8057) Offshore limits of sheet  
(1953)

C. VESSEL AND EQUIPMENT

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

Turning radius of Ship EXPLORER (from 1952 report):

- Full right rudder - 360 meters
- Full left rudder - 275 meters

EDO fathometer was used for all hydrography done by the ship for depths ranging from 30 to 600 fathoms. 808 fathometers were used on all launch hydrography except for hand lead soundings on shoals and at detached positions while obtaining bottom samples. All the 808 fathometers were used from 0 to 160 fathoms.

Fathometers used:

EXPLORER - EDO No. 4  
Launch No. 1 - 808 No. 49  
Launch No. 2 - 808 No. 50  
Launch No. 3 - 808 Nos. 72S, 127S.

D. TIDE AND CURRENT STATIONS

A portable tide gage was maintained at Tanaga Bay (same location as 1944 tide station). Tide reducers were determined from data obtained at this tide station for the entire sheet. No time or range corrections were applied.

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

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

E. SMOOTH SHEET

The smooth sheet was made by hand by the Seattle Processing Office.

Triangulation stations were plotted by the Seattle Processing Office. Topographic stations for which geographic positions were computed, were plotted from the geographic positions by the Seattle Processing Office. See par. F - CONTROL STATIONS. Other topographic stations were transferred direct to the smooth sheet by pricking thru graphic control manuscripts T-9921, T-9922, T-9923, T-9927 and T-9928.

Hydrographic stations were plotted by conventional methods.

Shoreline and topographic details were transferred direct to the smooth sheet from bromoil prints of topographic manuscripts T-9921, T-9922, T-9923, T-9927 and T-9928 (1953).

Shoreline and topographic details were verified in accordance with subject <sup>757</sup>575 of the Hydrographic Manual.

Positions and soundings from positions 33B to <sup>42</sup>43B (ship) are plotted on sheet H-8057 (EX-6253).

The northeast corner of the sheet was damaged by water leaking thru a window after the plotting was completed but before the topographic detail and the soundings were transferred to the sheet.

F. CONTROL STATIONS

Triangulation stations were established by C. D. Meaney in 1943, C. Pierce in 1944 and by this party in 1953.

Geographic positions of topographic stations ALP, CAW, COD, EGO, ELM, NEO, OLD, ORA, RAM, SOX, VAN and YAK were computed from fourth-order theodolite observations. See also topographic manuscripts T-9927 and T-9928 (1953).

Other topographic stations are photo-hydro stations located by photogrammetric methods on manuscripts T-9921, T-9922, T-9923, T-9927 and T-9928 from 1953 field inspection data.

The position of station GAS on T-9928 is not in agreement with the boat sheet and appears to be an incorrect position of the object used for the signal. The smooth sheet position of this station is the position of the rock west of GAS on T-9928. This signal is the high point of a rock with no white wash.

Stations MAL and FRY were moved from the positions on T-9928. *FRY & MAL were then used as the* MAN was plotted from a theodolite cut from ANVIL, 1953 and sextant *left and center* cuts from AND, 1943 and KID. FRY was plotted from a theodolite cut *object to cut in* from HIT, 1943, a sextant cut from KID and by re-arranging fix and *Hydro. signals* cut angles recorded in sounding volumes. *JUG & IRK*

Other hydrographic stations were located by conventional methods.

Theodolite directions and sextant angles observed on some signals were furnished with photogrammetric data for Tanaga Island.

Marked topographic stations established are TAN, HAWK and JUNX.

G. SHORELINE AND TOPOGRAPHY

Shoreline and topographic details are from photogrammetric compilation of manuscripts T-9921, T-9922, T-9923, T-9927 and T-9928 from 1953 field inspection data.

The rock <sup>*awash*</sup> at Latitude 51-55.17, Longitude 178-09.23 on manuscript T-9928 was not found nor was any evidence given from the hydrography that the rock exists. The least depth in the area of the rock is 44 fathoms. From this evidence the rock was removed from the smooth sheet and it is doubtful whether the rock exists. *Area adequate ly developed to disprove rock awash existence.*

There were no other discrepancies in topographic details indicated by the hydrography.

The following topographic details were located by the hydrographer and are not on manuscripts:

<i>Plotted bare rock?</i>					
N.P. Sunken rock at	Latitude	51-48.22	Longitude	178-05.34	<i>T-9928 shows bare rock</i>
(2) Rock awash at	"	51-48.28	"	178-05.24	
N.P. Sunken rock at	"	51-47.39	"	178-03.95	
Rock awash at	"	51-51.36	"	178-12.60	
Sunken rock at	"	51-51.42	"	178-12.65	
(1) Rock awash at	"	51-51.60	"	178-13.05	
Rock awash at	"	51-52.21	"	178-13.64	
(1) Rock awash at	"	51-55.30	"	178-05.55	
(2) Rock awash at	"	51-55.21	"	178-08.08	
Rock awash at	"	51-54.95	"	178-09.40	
<del>Rock awash at</del>	<del>"</del>	<del>51-55.32</del>	<del>"</del>	<del>178-05.55</del>	

All control stations in the water area are on rocks. *or islets.*

The low-water line was not defined by soundings. Extensive kelp along rocky shoreline and breakers on beaches prevented sounding into the low-water line.

In many cases the foul area and kelp line as defined by the hydrography extended further offshore than that defined by the topography. Kelp symbols and foul areas were plotted from data recorded in the sounding volumes and from the deletion of the foul and kelp areas drawn on the boat sheet by the hydrographer in the field.

Shoreline on the boat sheet was transferred from bromoil prints of preliminary manuscripts RS-426.

#### H. SOUNDINGS

All soundings on sounding lines were recorded with echo sounding equipment listed in paragraph C. See "Special Report on Fathometer Corrections - Ship EXPLORER - 1953". *In Library*

Hand lead soundings were obtained at detached positions as bottom samples were obtained and on shoals. *See verification report #36(1) & (3)*

#### I. CONTROL OF HYDROGRAPHY

All hydrography was controlled by visual sextant fixes on shore signals.

#### J. ADEQUACY OF SURVEY

The survey is considered complete and adequate for charting and complies with the Project Instructions and the Hydrographic Manual.

Junctions with adjoining surveys are satisfactory and depth curves can be adequately drawn except as noted below in par. L - COMPARISON WITH PRIOR SURVEYS.

There are no holidays. Additional lines were run in an apparent holiday between Latitude 51-48 to 51-50 and Longitude 177-10 to 177-12 and split by one line on H-7977 (1952).

#### K. CROSSLINES

The percentage of crosslines run was about 8%.

In the relatively even bottom from Cape Agamsik northwestward to Longitude 178-08 the crossings had no appreciable discrepancies to the principle system of lines. Considering the highly irregular bottom from Longitude 178-08, around Cape Sajaka and eastward, and the rapidly changing depth, there were no recognizable discrepancies in the crossings to the principle system of lines.

L. COMPARISON WITH PRIOR SURVEYS

This is a new survey and no prior surveys exist except at the junctions.

All soundings with the exception of one from H-7977 (1952) agree favorably with the survey. The sounding in question is that of 345 fathoms at Lat. 51-49.9, Long. 178-10.7. This depth appears to be 100 fathoms too deep. This survey and H-7023 (1944) support this reasoning. *245 fms is correct*

The soundings at the junction with Sheet H-7005 (1944) agree favorably.

The soundings at the junction with Sheet H-7026 (1944) agree favorably.

All the north and south soundings in the vicinity of 51-48', 178-10' to 178-12' on H-7023 (1944) appear to be plotted too far south. H-7977 (1952) also supports this displacement. *sds. in this area on H-7023*

A single line on H-7023 (1944) extends northwestward from Fan Point. This area was completely resurveyed and soundings on the single line from H-7023 (1944) are generally in agreement with this survey. *Superseded by H-8052*

The inshore line on H-7023 (1944) from 51-49.9, 178-09.8, northwestward, appears to be displaced slightly inshore. All other soundings are in general agreement.

Some displacement of soundings on H-7023 (1944) is apparently caused by inadequate and weak control.

M. COMPARISON WITH CHART *Chart 9146 in process of reconstruction. charted depths from H-8052 - See TP6 Review.*

A comparison was made with Chart 9146, print date 8/27/51. There are very few soundings on the chart in the area of this survey except those from Junction surveys. Most soundings on Chart 9146 in the area of surveys H-7023 (1944) and H-7026 (1944) appear to be from those surveys although many soundings are slightly different from smooth sheet soundings. Soundings on the chart may be from boat sheets. A separate comparison with charted soundings was not made if the soundings appeared to be from prior surveys.

A 200-fathom sounding at 51-48.6, 178-11.2 is about 200 fathoms shoaler than adjacent soundings on this survey and on H-7977 (1952). It is recommended that this charted 200-fathom sounding be deleted.

A 16-fathom sounding at 51-48.9, 178-07.3, is in agreement with this survey.

Shoreline on Chart 9146 is considerably in error in detail, shape and position. Shoreline and topographic detail are completely revised by photogrammetric compilation from 1953 field inspection data. *See TP1 Review*

N. DANGERS AND SHOALS

All dangers are in the foul area close to the shore line. There are no dangers in deep water areas.

Limiting dangers are:

Rocks awash at MHW at Lat. 51-46.7, Long. 178-02.8 from T-9928.

Rock awash at MHW at WHY from T-9928.

Shoal area extending 300 to 450 meters offshore southwest and west of Station AND, 1944.

Foul area extending 200 meters offshore between SOX and CAR.

Shoal area extending 300 meters westward from Tangent Point.

Rock awash at MLLW at Lat. 51-55.0, Long. 178-01.5 from T-9923.

Rock <sup>(8)</sup>~~awash~~ at Lat. 51-55.<sup>03</sup>.1, Long. 178-01.18

See par. G., SHORELINE AND TOPOGRAPHY for reference to doubtful rock at Lat. 51-55.17, Long. 178-09.23. *Hydrog. H-8052 disproves the existence of rock.*

A shoal of 4.2 fathoms exists at 51-46.95, 178-03.85 with hand lead at position 119c. This is not considered a danger because of its proximity to shore.

O. COAST PILOT INFORMATION

Refer to Coast Pilot notes.

The only ship anchorage in the entire area of this survey is in the open bight at 51-48.5, 178-06.5 in 15 fathoms with flat sand bottom.

During the survey the launches anchored in bights at:

1. 51-47.0, 178-03.0
2. 51-47.3, 178-03.6
3. 51-47.5, 178-04.0
4. 51-48.6, 178-05.3
5. 51-49.7, 178-10.6
6. 51-50.8, 178-10.6
7. 51-55.1, 178-04.1

There are no suitable anchorages even for a launch between anchorages Nos. 6 and 7 above.



P. AIDS TO NAVIGATION

No aids to navigation exist within the area of this survey. ✓

No bridges, overhead cables, submerged cables or ferry routes exist within the area of this survey.

Q. LANDMARKS FOR CHARTS

Recommended landmarks are reported on Form 567. ✓

Signal HIGH, a 350-foot waterfall, Lat. 51°-54'-1518m., Long. 178°-01'-375m., is the only landmark recommended for charting within the area of this survey.

Natural landmarks such as peaks, rocks and tangents are the only other landmarks. They will appear on charts by symbol and are not recommended specifically as landmarks.

R. GEOGRAPHIC NAMES

*on file with 864  
L.H.*

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-8052  
4 boat sheets, EX-2253, 2253A, 2253B, 2253C.  
7 sounding volumes, Vols. 1 to 7.  
Tracings of junction surveys H-7005 (1944), H-7023 (1944), H-7026 (1944), H-7977 (1952), H-8054 (1953), H-8057 (1953).  
4 envelopes of fathograms.

Data forwarded separately:

1. Field inspection report - Maps T-9921 thru T-9923, T-9927 thru T-9931, T-9935 thru T-9937 and T-9942 Tanaga Island, Alaska, Ship EXPLORER - 1953, including data listed therein, forwarded to Washington Office 25 September 1953.

2. Triangulation data - 1953 Season - forwarded to Washington Office 7 December 1953.

3. Tide data forwarded to Washington Office 14 September 1953.

4. Special Report on Fathometer Corrections - Ship EXPLORER - 1953.

5. Special Report on Landmarks for Charts.

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

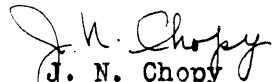
7. Coast Pilot Notes - U. S. Coast Pilot - Alaska, Part II, Yakutat Bay to Arctic Ocean - Ship EXPLORER - 1953 forwarded to Washington Office 27 November 1953. ✓

8. Form 567, Landmarks for Charts. ✓

Additional applicable data:

Topographic Manuscripts T-9921, T-9922, T-9923, T-9927 and T-9928 compiled from 1953 field inspection data. ✓

Respectfully submitted

  
J. N. Chopy  
Ensign, USC&GS

STATISTICSFOR HYDROGRAPHIC SURVEY H-8052 (1953)USC&GSS EXPLORERProject CS-218

<u>Vol. No.</u>	<u>Day Letter</u>	<u>Launch No.</u>	<u>Date</u>	<u>No. of H.L. or wire soundings</u>	<u>Nos Pos.</u>	<u>Stat. Miles Sndg. Lines</u>
1	A	Ship	6/4/53	--	62	24.7
1	B	Ship	6/25/53	--	71	33.0
2	a	2	6/4/53	--	56	16.4
2	b	2	6/5/53	--	173	33.2
2 & 4	c	2	6/6/53	8	163	34.0
3	a	3	6/4/53	--	84	16.9
3	b	3	6/5/53	--	163	33.0
4	d	2	7/7/53	1	77	15.9
5	c	3	6/6/53	--	194	42.3
5 & 6	d	3	6/25/53	--	143	19.8
6	e	3	6/26/53	2	35	2.7
6	f	3	6/27/53	--	183	25.4
7	a	1	6/28/53	--	120	17.1
7	b	1	7/7/53	3	132	17.0
7	c	1	7/17/53	1	55	8.1
TOTAL				14	1,711	339.5

Area: 24 square statute miles

NOTE:

*Positions 33B to 43B were plotted on H-8057*

## TIDAL NOTE

To Accompany

Hydrographic Sheet (Field No. EX-2253) Reg. H-8052

For the tide reducers on this sheet a tide gage was maintained in Tanaga Bay, Lat. 51-43.1, Long. 177-59.8.

The reading on the staff of MLLW is 6.3 feet and all soundings were reduced to that datum.

## TIDE REDUCERS

for

Hydrographic Sheet Reg. No. 8052  
(Field No. EX-2253)

June 4	From 0800 to 1300	-0.2 fm
	" 1300 to 1720	-0.1 fm
	" 1720 to 1805	-0.2 fm
	" 1805 to 1900	-0.3 fm
June 5	From 0800 to 1200	-0.3 fm
	" 1200 to 1340	-0.2 fm
	" 1340 to 1640	-0.1 fm
	" 1640 to 1800	-0.2 fm
	" 1800 to 1840	-0.3 fm
June 6	From 0800 to 0920	-0.2 fm
	" 0920 to 1800	-0.3 fm
June 25	From 0700 to 1110	+0.2 fm
	" 1110 to 1210	+0.1 fm
	" 1210 to 1300	0.0 fm
	" 1300 to 1350	-0.1 fm
	" 1350 to 1440	-0.2 fm
	" 1440 to 1540	-0.3 fm
	" 1540 to 1710	-0.4 fm
	" 1710 to 1945	-0.5 ft
" 1945 to 2220	-0.6 ft	
June 26	From 0730 to 0823	+0.2 fm
	" 0823 to 1115	+0.3 fm
	" 1115 to 1220	+0.2 fm
	" 1220 to 1315	+0.1 fm
	" 1315 to 1400	0.0 fm
	" 1400 to 1450	-0.1 fm
	" 1450 to 1540	-0.2 fm
	" 1540 to 1638	-0.3 fm
	" 1638 to 1800	-0.4 fm
	" 1800 to 2100	-0.5 fm
June 27	From 0750 to 0850	+0.2 fm
	" 0850 to 1150	+0.3 fm
	" 1150 to 1300	+0.2 fm
	" 1300 to 1350	+0.1 fm
	" 1350 to 1433	0.0 fm
	" 1433 to 1515	-0.1 fm
	" 1515 to 1600	-0.2 fm
	" 1600 to 1650	-0.3 fm
	" 1650 to 1800	-0.4 fm
" 1800 to 2100	-0.5 fm	

June 28	From 0735 to 0812	0.0 fm
	" 0812 to 0850	+0.1 fm
	" 0850 to 1000	+0.2 fm
	" 1000 to 1220	+0.3 fm
	" 1220 to 1328	+0.2 fm
	" 1328 to 1423	+0.1 fm
	" 1423 to 1508	0.0 fm
	" 1508 to 1550	-0.1 fm
	" 1550 to 1636	-0.2 fm
	" 1636 to 1730	-0.3 fm
	" 1730 to 1846	-0.4 fm
July 7	From 0700 to 0845	+0.2 fm
	" 0845 to 0953	+0.1 fm
	" 0953 to 1040	0.0 fm
	" 1040 to 1125	-0.1 fm
	" 1125 to 1210	-0.2 fm
	" 1210 to 1305	-0.3 fm
	" 1305 to 1410	-0.4 fm
	" 1410 to 1800	-0.5 fm
	" 1800 to 2030	-0.6 fm
July 17	From 0800 to 1135	-0.3 fm
	" 1135 to 1600	-0.2 fm
	" 1600 to 1710	-0.3 fm
	" 1710 to 1825	-0.4 fm

GEOGRAPHIC NAMESCharted Names

BERING SEA·  
CAPE AGAMSIK·  
CAPE SAJAKA·  
TANAGA BAY·  
TANAGA ISLAND·  
TANAGA PASS·

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

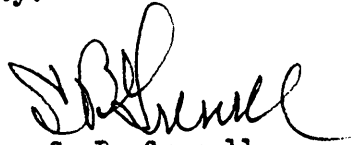
BLACKFACE POINT·  
FALLS POINT·  
FAN POINT·  
RIBBON FALLS·  
TANGENT POINT·

APPROVAL SHEETHYDROGRAPHIC SURVEY NO. H-8052

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

This survey is complete and adequate and no additional field work is recommended.

All hydrography done by the ship was under constant supervision of the Chief of Party and hydrography done by launches was under almost daily supervision of the Chief of Party.



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



GEOGRAPHIC NAMES

Survey No. H-8052

Name on Survey										
	A	B	C	D	E	F	G	H	K	
	On Chart No.	On previous survey No.	On U. S. quadrangle Maps	From local information	On local Maps	P. O. Guide or Map	Rand McNally Atlas	U. S. Light List		
Alaska										1
Aleutian Islands										2
Tanaga Island									BGN	3
Bering Sea										4
Cape Agamsik										5
Blackface Point										6
Fan Point										7
Cape Sajakka										8
Tangent Point										9
Falls Point										10
Ribbon Falls										11
Tanaga Pass										12
										13
										14
										15
										16
										17
<u>Tanaga Bay</u>										18
										19
										20
										21
										22
										23
										24
										25
										26
										27

Names approved  
3-31-54. L. Heck

(tide station)

## Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. H-8052..

## Records accompanying survey:

Boat sheets .4...; sounding vols. ...7..; wire drag vols. ....; bomb vols. ....; graphic recorder rolls 4 Env.; special reports, etc. 1 Smooth Sheet; 1 Descriptive Report; 6 Tracings of Junction Sheets; .....

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

Number of positions on sheet		1711
		.....
Number of positions checked		46
		.....
Number of positions revised		19
		.....
Number of soundings revised (refers to depth only)		525 *
		.....
Number of soundings erroneously spaced		15
		.....
Number of signals erroneously plotted or transferred		0
		.....
Topographic details	Time	16 hrs
		.....
Junctions	Time	40 hrs
		.....
Verification of soundings from graphic record	Time	8 hrs
		.....

Verification by *C.R. Helmer* ..... Total time *280 hrs* Date *9/22/55*

Reviewed by *Lu Zealand* ..... Time *46* Date *11-7-55*

\* 5% of total. (see verifier's report, item 36(4))

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-8052

FIELD NO. EX-2253

Alaska, Aleutian Islands, Andreanof Islands, West Side  
Tanaga Island

Project No. CS-218

Surveyed - June - July, 1953

Scale 1:20,000

Soundings:

Control:

Edo Fathometer  
808 Fathometer  
Handlead

Sextant fixes on  
shore signals

Chief of Party - S. B. Grenell  
Surveyed by - D. M. Whipp, R. F. Lanier, J. J. Dermody  
Protracted by - J. N. Chopy  
Soundings plotted by - J. N. Chopy  
Verified and inked by - C. R. Helmer  
Reviewed by - I. M. Zeskind 11-4-55  
Inspected by - R. H. Carstens

1. Shoreline and Control

The shoreline originates with unreviewed air-photographic surveys T-9921, T-9922 and T-9923 and reviewed air-photographic surveys T-9927 and T-9928 of 1953.

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

2. Sounding Line Crossings

Depths at crossings are in good agreement.

3. Depth Curves and Bottom Configuration

The usual depth curves were adequately delineated, except in depths less than 5 fms., where the foul area and inshore dangers generally prevented development to the low-water line.

This is an inshore survey of the western portion of Tanaga Island. The bottom is very irregular on the insular shelf

from shore to depths of 100 fms. and generally smooth in greater depths. Submarine features such as ledges, pinnacles and shoals contribute to the bottom irregularity.

#### 4. Junctions with Contemporary Surveys

Adequate junctions were effected with H-8057 (1953) on the north, H-8054 (1953) on the northeast, with H-7026 (1944) on the south and with H-7005 (1944) on the southeast. In the junctional area with H-7023 (1944) on the south, soundings on several lines on the earlier surveys differ with present depths by as much as 75 fms. in depths over 300 fms. Where the earlier depths are in conflict with present depths, the earlier soundings are superseded by the present soundings and a butt junction was made. The cause of the discrepancy was not ascertained.

The junction with H-7977 (1952) on the west will be considered in the review of that survey.

#### 5. Comparison with Prior Surveys

No prior surveys by this Bureau fall within the area of the present survey.

#### 6. Comparison with drawing No. 7 of Chart 9146

##### A. Hydrography

The charted hydrography originates with the boat sheet of the present survey. Smooth sheet soundings differ with the boat sheet soundings in many instances by as much as 3 fms. in depths less than 10 fms. The revisions to the charted hydrography are indicated on an overlay of the chart drawing for correction by the compiler.

##### B. Aids to Navigation

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

#### 7. Condition of Survey

(a) The descriptive Report and sounding records are complete and comprehensive, except as noted in paragraph (b) below.

(b) Numerous revisions were made in the recorded data in the sounding volumes by the field personnel because of uncertainties in the identification of the signals and the values of the

sextant angles. About one-third of the position fixes on b-day launch 3, were revised in the sounding volumes from one to six times because of the afore-mentioned reasons.

(c) Decimals of a fathom were not pencilled on the smooth sheet according to standard practice in that the fractional parts of many soundings in depths less than 11 fms. were omitted, whereas they were frequently shown in depths of 11-30 fms. in areas of steep gradients.

(d) The gain of the fathometer was not sufficiently adjusted to give adequate kelp separation and strong kelp traces were frequently misread for the bottom returns.

The deficiencies of the survey described in paragraphs (b), (c) and (d) above caused the verifier to spend considerable additional time verifying the smooth sheet.

8. Compliance with Project Instructions

The survey adequately complies with the Project Instructions.

9. Field Work Recommended

The survey is considered basic and no additional field work is recommended.

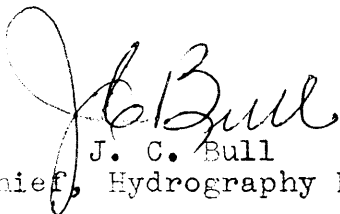
Examined and Approved:



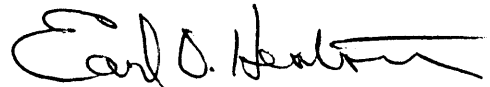
H. R. Edmonston  
Chief, Nautical Chart Branch



E. R. McCarthy  
Chief, Chart Division



J. C. Bull  
Chief, Hydrography Branch



Earl O. Heaton  
Chief, Division of Coastal Surveys

TIDE NOTE FOR HYDROGRAPHIC SHEET

839

~~Division of Coastal Surveys~~

24 March 1954

Division of Charts: R. H. Carstens

Plane of reference approved in  
7 volumes of sounding records for

HYDROGRAPHIC SHEET 8052

Locality Tanaga Island, Aleutian Islands, Alaska

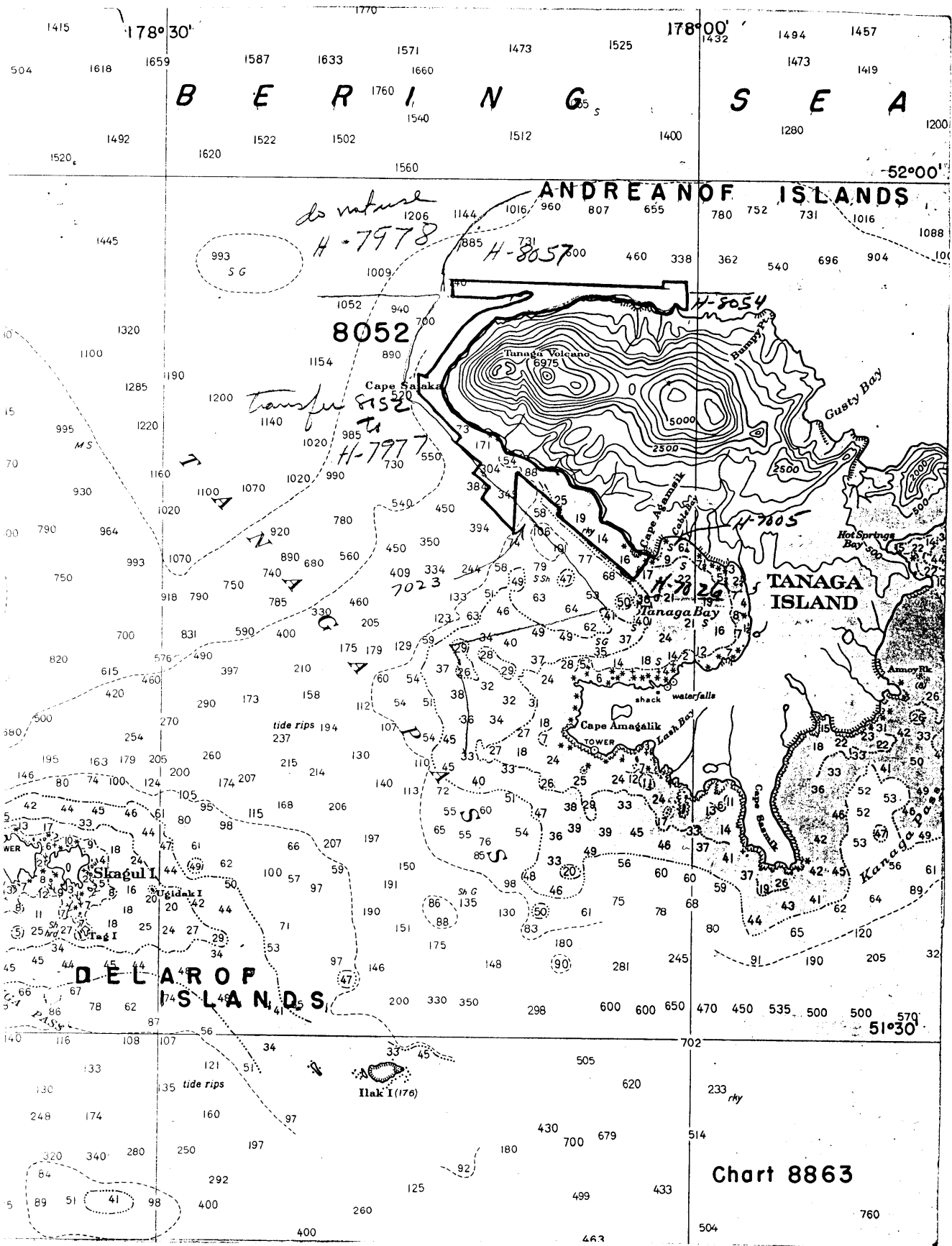
Chief of Party: S. B. Grenell in 1953  
Plane of reference is mean lower low water, reading  
6.3 ft. on tide staff at Tanaga Bay  
10.1 ft. below B. M. 1 (1944)

Height of mean high water above plane of reference is 4.0 ft.

Condition of records satisfactory except as noted below:

*E. C. McKay*

Chief, Division of Tides and Currents.



B E R I N G S E A

ANDREANOF ISLANDS

TANAGA ISLAND

DE L A R O F ISLANDS

Chart 8863

*do not use*  
*H-7978*

*H-8057*

*H-8054*

**8052**

*transfer*  
*H-7977*

**8152**

*H-7977*

*H-7975*

*H-7972*

*H-7976*

**7023**

*tide rips*

**Ilak I (176)**

**51°30'**





8863 - nothing added to Ride Over  
8/1/56 L. S. S.