

7005

7005

Form 504	
U. S. COAST AND GEODETIC SURVEY DEPARTMENT OF COMMERCE	
DESCRIPTIVE REPORT	
Type of Survey	HYDROGRAPHIC
Field No. DE-1144	Office No. H-7005
LOCALITY	
State	ALASKA - ALEUTIAN ISLANDS
General locality	TANAGA ISLAND
Locality	NORTH SIDE OF TANAGA BAY
1944	
CHIEF OF PARTY	
L. C. Wilder DERICKSON	Charles Pierce PATTON
LIBRARY & ARCHIVES	
DATE	MAY 21, 1945

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO.

H7005

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.

DE-1144
Field No. 1145

REGISTER NO. H-7005

State Alaska - Aleutian Islands

General locality Tanaga Island
Aleutian Islands

Locality North Side of Tanaga Bay - N. side

Scale 1:10,000 Date of survey June to Sept., 1944

Vessel DERICKSON PATTON

Chief of Party L. C. Wilder Charles Pierce

Surveyed by L. C. Wilder & E. B. Brown; Charles Pierce

Protracted by Christine H. Hillman

Soundings penciled by Christine H. Hillman

Soundings in fathoms ~~feet~~ fathoms and tenths

Plane of reference MLLW

Subdivision of wire dragged areas by

Inked by Herbert W. Burgayne

Verified by Herbert W. Burgayne

Instructions dated Proj. CS-219 - 4/16/45; 2/1/44, 19

" of Liaison Officer, Adak, June 10, 1944

Remarks:

Smooth Sheet and Plotting by the Seattle Processing Office

Descriptive Report to Accompany Hydrographic
Sheet H-7005 (Field No. DE-1144).

Scale 1:10,000

Tanaga Bay, Aleutian Ids., Alaska
L. C. Wilder Chief of Party
USC&GS DERICKSON
Season of 1944

PROJECT

This hydrography was accomplished under Project CS-218, Instruction dated 16 April 1943. Supplemental Instruction were dated 1 February 1944. Under date of 10 June 1944, Lt. Comdr. Durgin wrote instructions for the hydrography and topography of Tanaga Bay (Project 4, 1944).

SURVEY LIMITS AND DATES

This sheet covers the alongshore hydrography inside the work of the MV Patton, along the north and east shores of Tanaga Bay, Tanaga Id., Aleutian Ids., from Cable Bay to about the middle of the east end of the bay. The main part of the bay was accomplished by the MV Patton on H-7026 (1944), scale 1:20,000. H-7005 joins that sheet and the 1:5,000 sheet No. H-7004 (1944) at the head of the bay. There is no adjoining inshore work west of Cable Bay.

Work on this sheet was undertaken only when it would not interfere with the principle project of the season, 2nd Order Triangulation. For this reason the dates from beginning to end of field work covered a considerable period of time.

A party from the MV Patton, in a Navy Motor Sailer completed two days work and the boat sheet was then turned over to the MV Derickson. Work on this sheet started on June 7 (MV Patton) and ended on Sept. 26.

VESSEL AND EQUIPMENT

For ^{its} two days work, the MV Patton used a 50 foot Navy Motor Sailer loaned by the Navy and an 808A Fathometer. C. Pierce, Comdg. Officer, was in charge of the launch.

All work accomplished by parties from the MV Derickson was done in that vessel's 24 foot motor sailer using an 808A Fathometer with both transceivers placed in the bilges of the launch. This launch was operated from the MV Derickson. At different times L. C. Wilder, W. F. Malnate, E. B. Brown and E. E. Jones were in charge of the launch. The turning radius of this launch is 10 to 15 feet.

TIDE AND CURRENT STATIONS

A portable automatic tide gage tended by personnel of the MV Patton was in operation on the south shore of Tanaga Bay for all work except that of Sept. 21st to 25th at which time a gage was in operation in Lash Bay, Tanaga Id. Tides at that station were corrected to obtain the reducers at Tanaga Bay (this obtained from Wash. Off.

There were no current stations.

CONTROL STATIONS

Triangulation stations on these sheets were located in 1943 by the parties on the ships Explorer and Patton and in 1944 by the party on the MV Patton. Some of these stations are described as of 4th order accuracy. The topography of the north shore was run in by the personnel of the MV Patton in 1944, C. Pierce, Chief of Party. The number of that sheet is T-6974 (1944).

Many of the topographic stations were first located by sextant cuts. This was followed by the topographic ~~and graphic control~~ locations which were more accurate.

SOUNDINGS

Soundings were obtained by 808A Fathometer, the transceivers mounted in the bilges of the launch. Two to three bar checks were obtained each day with bar set at depths of 2 to 10 fathoms. Very few returns were obtainable with bar set at over 10 fathoms. The initial was adjusted so that with bar set at 2-fms., the sounding read correctly 2-fms. Revolutions of the 808A were counted at each bar check. Fathometer and lead line soundings were obtained also at each bar check when depths were suitable. The gain was kept around 8.5 to 9.0.

CONTROL OF HYDROGRAPHY

Usual three point fixes. ✓

ADEQUACY OF SURVEY

Adequate within the limits of the area surveyed. ✓

CROSSLINES

Only a few short cross lines were run. The party was not able to complete the main scheme of lines because of weather and lack of time. ✓

DANGERS AND SHOALS

There are ^{some} ~~numerous~~ ledges or reefs, but too close inshore to be of importance.

COAST PILOT INFORMATION

Coast pilot notes have been written for the entire seasons work in a separate report. ✓

Cable Bay is the only part of Tanaga Bay which offers some protection from westerly weather for small and medium craft. Small craft can get close inshore thereby obtaining considerable protection. This would not be safe anchorage for medium craft in a full gale. Bottom is sand of fair holding quality. ✓

The shores of Cable Bay and the head of Tanaga Bay are sand beaches. ✓

Water was obtained by drums from a stream deep in Cable Bay. There are two aircraft mooring buoys here. ✓

AID TO NAVIGATION

There are no aids to navigation. ✓

GEOGRAPHIC NAMES

A Special Report on Geographic Names for the seasons work has not been submitted because practically no information was obtainable.

There are no local inhabitants in the locality who may be consulted. Two small boat operators were consulted but they had no information.

The following names are known only by the fact that they are charted names or are mentioned in the Coast Pilot:

North Point - the low point at the west side of Cable Bay.

Cable Bay - the deepest bight in the north shore of Tanaga Bay.

Also a name could be given the ledge which makes out from the sand beach at about the middle of the head of Tanaga Bay. I have suggested Middle Ledge or Reef.

Respectfully Submitted

/s/ L. C. Wilder

L. C. Wilder
Lieut. Comdr., USC&GS

Statistics for Hydrographic Survey No. H-7005 (Field 1144) (1944)

M. V. PATTON

Day	Vol.	Date	No. of H. L. Soundings	Positions	Statute Miles
a	1	6/7/44	1	54	11.4
A	1	6/8/44	0	45	2.8
B	1	6/10/44	1	67	13.1

M. V. DERICKSON

a	2	7/5/44	1	62	10.0
b	2	7/12/44	2	90	15.0
c	2	7/18/44	2	102	14.3
d	2	8/25/44	2	49	9.5
e	3	9/26/44	6	247	43.4
Totals			15	716	109.5

Area of survey, 3.6 square statute miles.

Hydrographic Surveys H-7005 & H-7006 (1944)
(Field Nos. 1144, 1244 & 1344)

TIDE NOTE

Location of tide station: Tanaga Bay (through Sept. 10), Lat. 51° 43.1' N.
Long. 178° 00.0' W.

Zero of tide staff is 2.3 ft. below Mean Lower Low Water. No corrections for differences in time or height were applied to observed tides.

Hourly heights for July 8, 12, 18, 21, Aug. 25, and Sept. 21, 23, 25, and 26 were furnished by the Washington Office. As the Tanaga Bay tide gage was not in operation after Sept. 10th, the source of the hourly heights on subsequent days is not known. Those furnished by the Washington Office for such dates are as follows:

Hour	Sept. 21	23	25	26
0800	4.3	4.0	3.0	2.5
9	4.2	4.4	3.6	3.1
10	4.1	4.6	4.2	3.7
11	3.9	4.7	4.5	4.2
12	3.8	4.7	4.8	4.6
13	3.8	4.7	4.9	4.9
14	4.0	4.8	5.0	5.1
15	4.2	4.9	5.1	5.2
16	4.5	5.1	5.1	5.3
17	4.8	5.3	5.3	5.4
18	5.0	5.5	5.5	5.5
19	---	---	5.7	5.7
20	---	---	5.9	5.9

VELOCITY CORRECTIONS

M.V. DERICKSON

From observations by the M.V. PATTON
7/2/44 and 7/19/44

808A - Launch		820 fms/sec.	
Fms.		Fms.	Corr'n in Ft.
0	to	3.5	0
3.5	to	11	-1
11	to	18	-2
18	to	27	-3
27	to	33	-4
33	to	41	-5
41	to	48	-6
48	to	56	-7
56	to	63	-8
63	to	71	-9
71	to	79	-10
79	to	86	-11
86	to	94	-12
94	to	101	-13
			Corr'n in Fms.
97	to	120	-2.5
120	to	142	-3.0
142	to	164	-3.5
164	to	186	-4.0

Note: The serial temperatures obtained are considered inadequate. Comparison of this table with velocity corrections computed by the SS EXPLORER show close agreement with their corrections for the months of July and August, and some divergence from their corrections based on temperatures observed on September 29, 1944. However, the EXPLORER was not in the vicinity of Tanaga Bay during the working season.

Comparison of this table with corrections computed by the E. LESTER JONES from observations at Amchitka Id. in September, 1944 show the difference as follows:

at	10 fm.	diff.	0
	20		0.2 ft.
	30		0.4 "
	40		0.6 "
	50		0.6 "

Approval Sheet

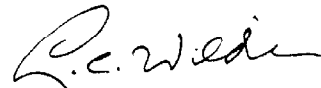
Hydrographic Sheets H7005 & H7006 (1944)

Records Approved.

Smooth Sheet has not been completed.

Sounding volumes and sheets were examined daily.

See Descriptive Report "Adequacy of Survey".



L. C. Walden, Lieut. Comdr.
Chief of Party

(DE 1144)

H-7005

Tanaga Bay - North Side

Seattle Processing Office Notes

Datum-

Unalaska

Control-

Triangulation by Meaney, 1943, and Pierce, 1944. Topographic signals ✓
from T-6974 a & b. ⁽¹⁹⁴⁴⁾ There are no hydrographic signals on the sheet.

Shoreline-

From T-6974 a & b ⁽¹⁹⁴⁴⁾ ✓

Shoals-

~~Note the 0 6/10 fm. sounding, pos. 15d, at Lat. 51° 47'4" Long. 178° 00'95".~~

Comparison with Chart 9146-

This chart, within the area concerned, was compiled from soundings taken ✓
from the boat sheet for H-7005. The chart and smooth sheet bear the same
relation as boat sheet and smooth sheet. They are in agreement.

List of Geographic Names Penciled on H-7005

Tanaga Island

Tanaga Bay

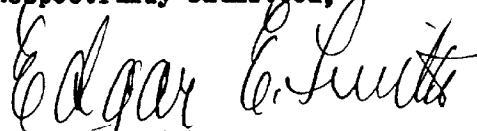
Cape Agamsik ✓

Cable Bay

Middle Ledge (See Report H-7004) (1944)

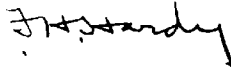
Southeast Bight (See Report H-7004) (1944)

Respectfully submitted,

A handwritten signature in cursive script that reads "Edgar E. Smith".

Edgar E. Smith
Cartographic Engineer
Seattle Processing Office

Approved and Forwarded:

A handwritten signature in cursive script that reads "F. H. Hardy".

F. H. Hardy
Officer in Charge,
Seattle Processing Office

GEOGRAPHIC NAMES

Survey No. **H7005**
H7006

Name on Survey	A On Chart No.	B On previous survey No.	C On U. S. 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
<u>Aleutian Islands</u>				(for title)					1
<u>Tanaga Island</u>				515 775				USGB	2
<u>Tanaga Bay</u>				515 780					3
<u>Middle Ledge</u>				515 775					4
<u>Cable Bay</u>				515 780					5
<u>Cape Agamsik</u>				"					6
									7
									8
									9
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									27

Names transferred to 180 reports
by L. Heck on 9/28/45

Surveys Section (Chart Division)

HYDROGRAPHIC SURVEY NO. ~~12047~~ **H7005**

Records accompanying survey: (total for both-sheet surveys)

Boat sheets .2.; sounding vols. 6.; wire drag vols.;
 bomb vols.; graphic recorder rolls .3..(2 of which is for 7006)
 special reports, etc. ~~Velocity Correction data for season 1944~~ .by
 .. C. Pierce .. (filed with that for H- 7026, 7023, 7004, and F. E. No. 1-1945)

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

Number of positions on sheet	700 ⁵	..7/6.
Number of positions checked		...47.
Number of positions revised		...1.
Number of soundings recorded		..5850
Number of soundings revised (refers to depth only)		...9
Number of soundings erroneously spaced		..5..
Number of signals erroneously plotted or transferred		...0..
Topographic details	Time	...14..
Junctions	Time	...12..
Verification of soundings from graphic record	Time	...4..

Verification by *Herbert W. Burgoyne* .. Total time ..13 hrs Date 7/17/45.....

Review by ...*J. A. McCormick*..... Time 6 hrs Date 9/27/45..

Hydrographic Surveys H-7005 & H-7006TIDE NOTE

Location of tide station: Tanaga Bay (through Sept. 10),
Lat. $51^{\circ} 43'11''$ N. Long. $178^{\circ} 00'10''$ W.

Zero of tide staff is 2.3 feet below Mean Lower Low Water.
No corrections for differences in time or height were applied to
observed tides.

Hourly heights for July 8, 12, 18, 21, Aug. 25, and Sept. 21,
23, 25, and 26 were furnished by the Washington Office. As the Tanaga
Bay tide gage was not in operation after Sept. 10th, the source of the
hourly heights on subsequent days is not known. Those furnished by
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13	3.8	4.7	4.9	4.9
14	4.0	4.8	5.0	5.1
15	4.2	4.9	5.1	5.2
16	4.5	5.1	5.1	5.3
17	4.8	5.3	5.3	5.4
18	5.0	5.5	5.5	5.5
19	---	---	5.7	5.7
20	---	---	5.9	5.9

LAC
HWM

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

TIDE NOTE FOR HYDROGRAPHIC SHEET

28 May 1945

~~-Division of Hydrography and Topography-~~

✓ Division of Charts: Attention: H. W. MURRAY

Plane of reference approved in
3 volumes of sounding records for


HYDROGRAPHIC SHEET 7005

Locality Tanaga Bay (North Side), Aleutian Islands

Chief of Party: Chas. Pierce and L. C. Wilder in 1944
Plane of reference is mean lower low water reading
2.3 ft. on tide staff at Tanaga Bay
10.3 ft. below B. M. 1

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

Condition of records satisfactory except as noted below:


Chief, Division of Tides and Currents.

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. 7005

FIELD NO. DE-1144

Aleutian Island; Tanaga Island; North Side of Tanaga Bay
Surveyed in June - Sept. 1944 Scale 1:10,000
Project No. CS-218

Soundings:

Control:

808A Fathometer

Three-point fixes on shore signals

Chief of Party - L. C. Wilder; C. Pierce
Surveyed by - L. C. Wilder; C. Pierce; E. B. Brown
Protracted by - C. N. Hillman
Soundings plotted by - C. N. Hillman
Verified and inked by - H. W. Burgoyne
Reviewed by - J. A. McCormick, Sept. 27, 1945
Inspected by - H. W. Murray

1. Shoreline and Signals

Shoreline and topographic signals are from T-6974a and b (1944).

2. Sounding Line Crossings

Satisfactory.

3. Bottom Configuration

Bottom is mostly smooth sand with occasional rocks and ledges along-shore. There are no outstanding dangers in the area.

4. Adjoining Surveys

Satisfactory junctions were effected with H-7004 (1944) on the south and with H-7026 (1944) on the south and west. The inshore area west of Cape Agamsik has yet to be surveyed.

5. Previous Surveys

Only previous survey of Tanaga Bay is the 1:120,000 scale reconnaissance, H-6778 (1943). The few soundings which it shows within the actual limits of the present survey are satisfactory as to position and depth but can now be disregarded.

6. Comparison with Chart 9146 (Print of March 31, 1945)

Depths now charted in this area are from preliminary blueprints, made in the field from boatsheets of the present and adjoining surveys. Differences between chart and survey are extremely minor but the chart should eventually be brought to agreement with the basic survey.

7. Compliance with Project Instructions

Satisfactory.

8. Additional Field Work Recommended

For the record, it is noted that some additional soundings would have been desirable around Middle Ledge and northward along shore. Additional field work is not recommended.

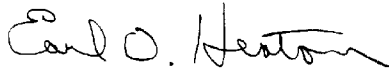
Examined and approved:



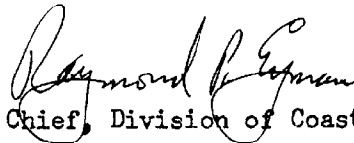
Chart Division
Robert W. Knox
Chief, Nautical Chart Branch



Chief, Chart Division



Chief, Section of Hydrography



Chief, Division of Coastal Surveys

NAUTICAL CHARTS BRANCH

SURVEY NO. H.7005

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
Oct. 2 '45	8863	J. M. A.	Before After Verification and Review
7-23-51	9146	W. J. Brown	Before After Verification and Review <i>Prints applied thru prints of boat sheet. Examined for critical changes - no corrections at this time.</i>
16 Feb. 55	Reconst. 9146	H. E. MacLennan	Before After Verification and Review <i>Tally applied.</i>
12/16/58	Correct 8863	J. F. Walker	Before After Verification and Review
12/30/92	10967	Joseph Brown	Before After Verification and Review
			Before After Verification and Review
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			Before After Verification and Review

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.