

11496

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11496

Form 504 U. S. DEPARTMENT OF COMMERCE COAST AND GEODETIC SURVEY DESCRIPTIVE REPORT	
<i>Type of Survey</i> <u>Shoreline (Photogrammetric)</u>	
<i>Field No.</i> <u>Ph-117</u>	<i>Office No.</i> <u>T-11496</u>
LOCALITY	
<i>State</i> <u>Alaska</u>	
<i>General locality</i> <u>Tlevak Strait</u>	
<i>Locality</i> <u>Farallon Bay to Shelikof Island</u>	
<u>1954 - 1958</u>	
CHIEF OF PARTY F. X. Popper, Chief of Field Party William F. Deane, Baltimore District Officer	
LIBRARY & ARCHIVES	
DATE _____	

DESCRIPTIVE REPORT - DATA RECORD

T -11496

Project No. (II): **(GS-357)
Ph-117** Quadrangle Name (IV):

Field Office (II): **USC&GS Ship PATTON**

Chief of Party: **F. X. Popper**

Photogrammetric Office (III): **Baltimore, Md.**

Officer-in-Charge: **E. H. Kirsch
W. F. Deane**

Instructions dated (II) (III): **11 October 1954
7 January 1955
9 December 1955
1 November 1957
11 June 1958**

Copy filed in Division of
Photogrammetry (IV)

Method of Compilation (III): **Graphic**

Manuscript Scale (III): **1:10,000**

Stereoscopic Plotting Instrument Scale (III):

Scale Factor (III): **1.000**

Date received in Washington Office (IV):

24 OCT 1958

Date reported to Nautical Chart Branch (IV):

Applied to Chart No.

Date:

Date registered (IV):

Publication Scale (IV):

Publication date (IV):

Geographic Datum (III): **N.A. 1927**

Vertical Datum (III): **MHW**

Mean sea level except as follows:
Elevations shown as (25) refer to mean high water
Elevations shown as (5) refer to sounding datum
i.e., mean low water or mean lower low water

Reference Station (III): **GUIDE, 1907**

Lat.: **55° 12' 59.934" (1853.5 m)** Long.: **133° 04' 13.675" (241.8 m)**

Adjusted
~~Coordinates~~

Plane Coordinates (IV):

State: **Alaska - UTM** Zone: **8**

Y=

X=

Roman numerals indicate whether the item is to be entered by (II) Field Party, (III) Photogrammetric Office,
or (IV) Washington Office.

When entering names of personnel on this record give the surname and initials, not initials only.

DESCRIPTIVE REPORT - DATA RECORD

Field Inspection by (II): K. W. Jeffers

Date: 1958

Planetable contouring by (II):

Date:

Completion Surveys by (II):

Date:

Mean High Water Location (III) (State date and method of location): 1954, date of photography.
Field inspection, 1958, on 1955 photography.

Projection and Grids ruled by (IV): A. Riley

Date: 10/25/54

Projection and Grids checked by (IV): A. Riley

Date: 10/26/54

Control plotted by (III): B. Wilson

Date: 12/1/54

Control checked by (III): H. R. Rudolph

Date: 12/14/54

Radial Plot ~~of Stereoscopic~~

Date: 3/14/55

~~and Contours~~ by (III): E. L. Williams

Stereoscopic Instrument compilation (III):
Planimetry

Date:

Contours

Date:

Manuscript delineated by (III): J. B. Phillips
J. Honick

Date: 9/9/58

Photogrammetric Office Review by (III): R. Glaser

Date: 9/19/58

Elevations on Manuscript
checked by (II) (III):

Date:

DESCRIPTIVE REPORT - DATA RECORD

-4-

Camera (kind or source) (III): Nine-lens, single lens, "O" and "W"

Number	Date	PHOTOGRAPHS (III)		Scale	Stage of Tide
		Time			
45418	6/4/54	1133		1:20,000	0.3 below MLLW
54-0-32 thru 35	"	1040		1:10,000	1.8 " "
55-W-9098 thru 9100	8/6/55	1149		"	4.6 above MLLW

Tide (III)
From Predicted Tide Tables

Reference Station: Sitka, Alaska
Subordinate Station: North Bay
Subordinate Station:

Ratio of Ranges	Mean Range	Spring Range
	7.7	9.9
	10.9	13.0

Washington Office Review by (IV): D. M. BRANT

Date: JUNE 1970

Final Drafting by (IV):

Date:

Drafting verified for reproduction by (IV):

Date:

Proof Edit by (IV):

Date:

Land Area (Sq. Statute Miles) (III):

Shoreline (More than 200 meters to opposite shore) (III): 25 mi.

Shoreline (Less than 200 meters to opposite shore) (III): 2.4 mi.

Control Leveling - Miles (II):

Number of Triangulation Stations searched for (II): 13 Recovered: 11 Identified: 4

Number of BMs searched for (II): Recovered: Identified:

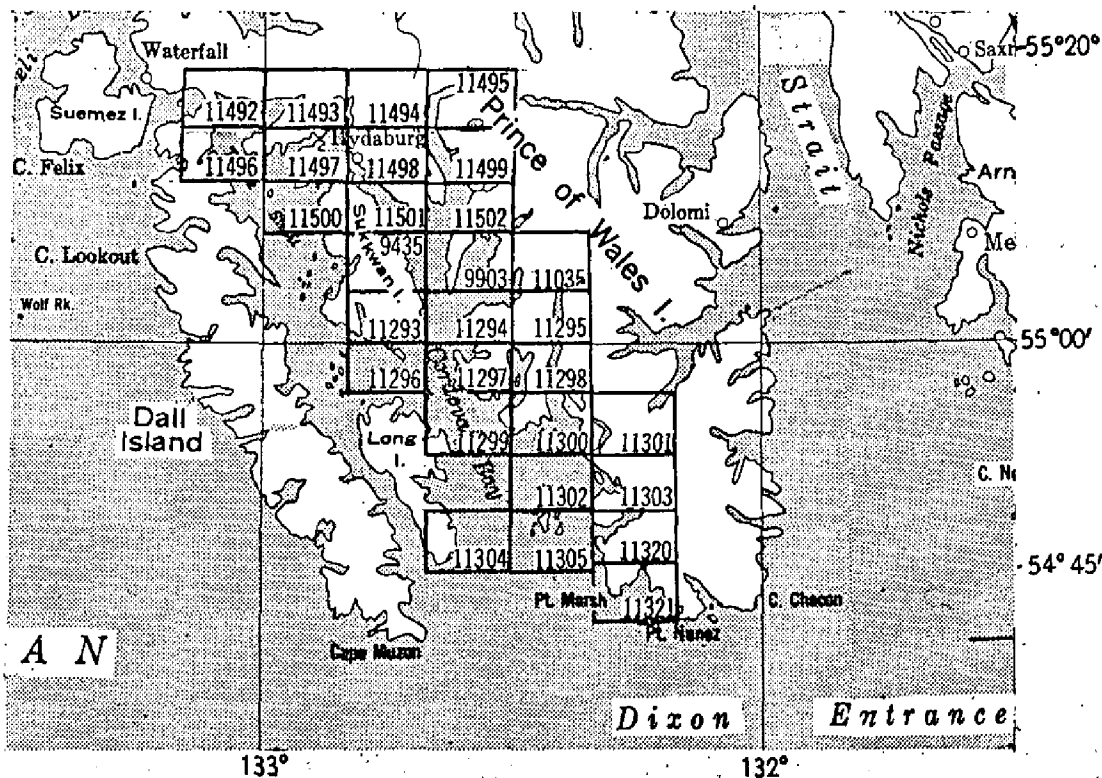
Number of Recoverable Photo Stations established (III):

Number of Temporary Photo Hydro Stations established (III):

Remarks: 8 new triangulations established in 1958 - 5 identified.

SHORELINE MAPPING PROJECT PH - 117

Cordova Bay & Vicinity of S.E. Alaska



OFFICIAL MILEAGE FOR COST ACCOUNTS			
SHEET NO.	AREA SQ. MILES	LIN. MI. SHORELINE	
9435	13	13	11304 12
9903	21	21	11305 37
11035	9	9	11320 24
11292	20	20	11321 20
11294	15	15	11492 24
11295	13	13	11493 12
11296	14	14	11494 2
11297	21	21	11495 16
11298	23	23	11496 17
11299	16	16	11497 26
11300	31	31	11498 8
11301	7	7	11499 11
11302	18	18	11500 27
11303	14	14	11501 17
			11502 15
			TOTALS 503 503

Summary to Accompany
Descriptive Report
All T-Numbers
PH-117

September 1970

This project is comprised of twenty-nine shoreline surveys compiled at 1:10,000 scale. It covers an area in the vicinity of Cordova Bay in southeast Alaska. The purpose for the compilation of these shoreline surveys was to provide a base for hydrographic survey operations and to update marine charts of the area.

The shoreline area was covered with single-lens and nine-lens photography. Field inspection prior to compilation consisted only of recovery and identification of control. Control was extended by radial plot method in the Baltimore District Office prior to graphic compilation. The shoreline was delineated from office interpretation of the photographs.

Copies of the manuscripts and the ratio photographs were sent to the hydrographic parties (ships HODGSON and PATTON) for hydro support use. Hydro signals were identified and described. Corrections and additions to the shoreline and offshore details were made from field annotated photographs. This has been treated as field inspection throughout this project, but actually it is field edit.

The application of field inspection and photogrammetric office review was done in the Baltimore District Office.

Map Accuracy

The extension of control (radial plots) for the subject maps was considered to be sub-standard in accuracy (refer to radial plot reports). However, the maps were used to provide shoreline and control for hydrographic surveys and were found by the hydrographer to be generally satisfactory for this purpose. A new project is planned for this area.

(Continued)

Differences Between Contemporary Hydrographic and Topographic Surveys

Field inspection was done during hydrography (refer to the field inspection report). Where the application of field inspection (additions and corrections) was not applied to the hydrographic surveys, they were called to the attention of the hydrographic verification and review activities by the following means:

1. For an unverified smooth sheet a "Notes to the Verifier" page was inserted in the Hydrographic Survey Descriptive Report.
2. For an unreviewed smooth sheet a "Notes to the Reviewer" page was inserted in the Hydrographic Survey Descriptive Report.
3. For reviewed hydrographic surveys the Chief, Hydrographic Data Branch was notified.

The remaining discrepancies were disposed of in conference with the Hydrographic Review Branch.

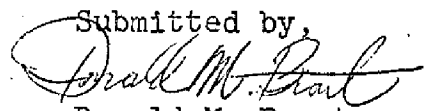
Rock Elevations

Differences in some rock elevations were found during final review between a number of the photogrammetric surveys and the contemporary hydrographic surveys. It was decided in conference with the Hydrographic Review Branch that since the rock elevations were from predicted tides they would be removed in most cases from the photogrammetric surveys and the elevations on the hydrographic surveys would be used because of more accurate tide data. An ozalid copy of all manuscripts showing the rock elevations computed from predicted tides will be filed along with available field inspection photographs in the Federal Records Center.

A complete Geographic Names Investigation was made and a final names sheet is a part of this report.

Field records were incomplete at the time of final review. Available field data was used at this time.

A registration manuscript copy for all surveys, except T-11301 and T-11321 which are lost, will be registered in the Bureau Archives under their respective T-numbers.

Submitted by,

Donald M. Brant

FIELD INSPECTION REPORT

T-11492, T-11493, T-11496

2. AREAL FIELD INSPECTION

This report covers the shoreline from Meares Island on the northwest side of Tlevak Narrows to just south of Farallon Bay in Tlevak Strait, including Soda Bay. The inspection was made from a skiff, with landings being made at frequent intervals.

The shoreline is generally rocky with trees overhanging the high water line in many areas. The region is cluttered with small islands, reefs, and foul areas.

Cultural features are virtually absent; there being only a few trappers' shacks and a logger's camp present in the entire region.

Photo coverage is fair with the exception of the Lively Islands and Guide Is. These islands are visible only on the fringe of a few photographs, and are quite blurred. Shadows obscure the high water line and recoverable horizontal control points in some cases.

3. HORIZONTAL CONTROL

(a) The following stations were established in 1958 to control the photographs in Soda Bay.

<u>Second Order</u>	<u>Third Order (Intersection)</u>
ABLE ECC.	Block Island Light
FIRST*	Lively Island Light
INTER	
LIKOF*	
NATAL	
PHOTO*	
ROUND*	
SODA*	
SHELI	
SUNNY*	
TROUT*	
WALES*	

*Stations identified on the photographs.

3. HORIZONTAL CONTROL (Contin.)

To control the photographs in the vicinity of Halibut Nose, Station STEEP, 1958 was established and identified on the photographs. The triangulation data for this station is included with the report. This station will be incorporated in the triangulation scheme through North Pass at a later date.

(b) All horizontal control is computed on the NA 1927 Datum and no datum adjustments are necessary.

(c) All control was established by the U. S. Coast and Geodetic Survey.

(d) All control called for in the Instructions was established and/or identified on the photographs.

(e) All Coast and Geodetic Survey stations in the area were thoroughly searched for. The following stations were reported as searched for, not found, and presumed lost:

- BIG 1907
- DARK 1907
- GUND 1907
- ISLE 1907
- NORTH BASE (North Bay) 1907
- OUT 1907
- SOUTH BASE (North Bay) 1907
- TURN 1907

4. VERTICAL CONTROL

In applicable

5. CONTOURS AND DRAINAGE

Inapplicable

6. WOODLAND COVER

The area is covered with a dense growth of trees composed mainly of spruce, cedar and hemlock. The tree line and high water line coincided or are very close in many places.

7. SHORELINE AND ALONGSHORE FEATURES

(a) The mean high water line is indicated at various places on the photographs. In general it appears as the seaward side of a distinct white line on the photographs. This white area is caused by grass covered rock or the jumble of driftwood lining the beach. In some areas the high water line is obscured by shadows or overhanging trees; however, a comparison with the manuscripts indicated that the office interpretation was correct for charting purposes.

In the region of Tlevak Narrows where extensive areas bare at low water, a visual inspection on the ground was made and the high water line sketched on the photographs.

(b) The low water line is dotted on the photographs at various places. This line will be better defined after the hydrographic survey has been completed.

(c) The foreshore is characterized by boulders in the greater part of the area. Bedrock is exposed in many places, and some stone and gravel beaches are present. There are no beaches composed of sand and gravel such as shown on the manuscripts. The foreshore is labeled at various locations on the photographs.

(d) There are no high bluffs or cliffs along the shore line. The southern shore of Shelikof Island has a few low cliffs (10 to 20 feet) and rock ledges that rise from the water's edge.

(e) There are no docks, wharves, piers, or landings in the area.

(f) There are no submarine cables in the area.

8. OFFSHORE FEATURES:

The only offshore features are rocks, reefs, shoals, and kelp beds. Heights of rocks and reefs above the water surface were estimated and noted on the photos along with the time (120th meridian) and date. Hand lead soundings were made and depth noted on some shoals and foul areas that were covered by water at the time of inspection. Kelp beds visible on the photos were noted as such, and the kelp symbol was used in other areas.

9. LANDMARKS AND AIDS:

There are no landmarks in the area. Three fixed aids to navigation in the area are: Meares Island Light, Block Island Light, and Lively Islands Light. Meares Island Light will be located by planetable. The other two were located by intersection using a theodolite.

The only floating aid to navigation is the red buoy on the northwest side of Tlevak Narrows. It will be located by plane table.

None of these aids were pricked on the photographs.

10. BOUNDARIES, MONUMENTS, AND LINES:

Inapplicable.

11. OTHER CONTROL:

No other control was established at this time. A plane-table graphic control sheet will be made of the area north of Tlevak Narrows prior to the hydrographic survey.

12. OTHER INTERIOR FEATURES:

None.

13. GEOGRAPHIC NAMES:

Geographic names will be covered in a special report, to be submitted later.

14. SPECIAL REPORTS AND SUPPLEMENTAL DATA:

Data forwarded separately from this report are:

14. SPECIAL REPORTS AND SUPPLEMENTAL DATA (Contin.):

Field and Office Photographs.
Control Station Identification Cards.
Descriptions of Recoverable Triangulation Stations.
Complete triangulation data for stations established.

15. LIST OF CONTROL STATIONS IDENTIFIED:

A complete list of horizontal control stations and the photographs on which they were identified follows:

Station	Manuscript	Photo No.
CEDAR, 1907	T-11492	55W9090
EAST, 1907	T-11496	55W9098
FIRST, 1958	T-11496	55W9711
KNOB, 1907	T-11496	55W9100
LIKOF, 1907	T-11496	55W9712
MID, 1907	T-11492	55W9713
MOSS, 1907	T-11492	55W9090
PHOTO, 1958	T-11493	55W9710
ROUND, 1958	T-11493	55W9710
SAW, 1907	T-11492	55W9090
SODA, 1958	T-11496	55W9711
STEEP, 1958	T-11496	54-0-35
SUNNY, 1958	T-11493	55W9710
TROUT, 1958	T-11493	55W9710
WALES, 1958	T-11496	55W9711

Respectfully submitted,

K. William Jeffers
K. W. Jeffers
ENS C&GS
Ship PATTON

Approved & Forwarded:

Francis X. Popper
Francis X. Popper
LCDR C&GS
Cmdg., Ship PATTON

PHOTOGRAMMETRIC PLOT REPORT
PROJECT PH-117
SURVEYS T-11492 thru T-11502

21. AREA COVERED

This radial plot covers the area of shoreline surveys T-11492 thru T-11502 in the vicinity of Sukkwan Strait and Hetta Inlet on Prince of Wales Island, Alaska. This radial plot at 1:20,000 scale was used to establish pass points to control a radial plot with single lens photographs at a scale of 1:10,000.

22. METHOD - RADIAL PLOT

Map Manuscripts:

Vinylite sheets with polyconic projections in black at a scale of 1:10,000, and Universal Transverse Mercator Alaska, Zone 8, grids in red, were furnished by the Washington Office. Base sheets were prepared in this office, at a scale of 1:20,000.

All control was plotted using the meter bar and beam compass.

A sketch showing photograph centers, distribution of control, and layout of surveys is attached to this report.

Photographs:

Fifteen (15) unmounted nine lens photographs at a scale 1:20,000 were used in this radial plot, with the following numbers: 45392, 45393, 45396 thru 45400, and 45412 thru 45419.

Templets:

Vinylite templets were made for all photographs using a master templet to make adjustments for paper and film distortion and chamber displacement.

Closure and adjustment to control:

All control was transferred graphically to the 1:20,000 scale base sheets, the plot was begun at the southwestern end of the two flights where a fix could be obtained on 45392. The northern flight was extended north-eastward to control station TIP, 1924. The southern flight was extended eastward holding control stations FLOAT, 1908-14, and ROUND, 1908. At the eastern end of the flight in surveys T-11499 and T-11502 the plot was adjusted to pass points established in a previous plot. The previous plot was a long bridge between control stations in Cordova Bay and identified control in Clarence Strait on the east side of Prince of Wales Island. At the northern end of Hetta Inlet in T-11495 there was very little side lap between the two flights. It was not possible to hold Sub Pt. TIP, 1924, and the pass points from the previous plot on the southern flight and at the same time get good intersections in this area. After considerable adjustment of templets it was decided to hold slightly off TIP, 1924, in order to get a more rigid plot in the northern tip of HETTA INLET.

Transfer of points:

All pass points which were common on both the nine lens and single lens, 1:10,000 scale, photographs were transferred to 1:10,000 scale base sheets, using small transparent templates. A template was made for each pass point drawing radial lines to four grid intersections on the 1:20,000 scale base sheet. The position of the point was established on the 1:10,000 scale base sheet by holding the same grid intersection and pricking the position of the point through to the base sheet. In survey T-11496, in the area where there was no coverage with single lens photographs, the positions were transferred in similar manner to the map manuscripts. These points are to be used for delineation of shoreline, using the 1:20,000 scale nine lens photographs in the vertical projector.

23. ADEQUACY OF CONTROL

Except in the southern and southwestern side of the plot, control was inadequate for an accurate radial plot. There was no control in the northern part of Hetta Inlet in surveys T-11495 and T-11499. The purpose of this plot was to establish control points to be used in a radial plot at a scale of 1:10,000 with single lens photographs. The positions of pass points in this survey are known to be quite weak because of the long bridge between control stations; and because control station TIP, 1924, was not held exactly. The identification of Sub Pt. TIP, 1924, is doubtful because of shadows and trees and may be up to 0.5mm in error. It is believed, the positions of these pass points may be in error by 0.5mm or more in this plot. When transferred to 1:10,000 scale base sheets this error would be doubled. This means that the positions of Pass points on the map manuscripts may possibly be in error by 1.0mm or more. The results obtained are not considered to be satisfactory due to the lack of control, however they are the best that can be obtained at the present time. Several tilted photographs in the uncontrolled area added to the difficulty of getting a satisfactory plot. (See paragraph 25)

An attempt was made to identify MID, 1907, in the office to strengthen the plot, but it could not be held. The radially plotted position fell 30 meters southeast of the true position. All other identified control stations, including those identified in the office, were held satisfactorily in the radial plot.

24. SUPPLEMENTAL DATA

No supplemental data was used in this radial plot.

25. PHOTOGRAPHY

Photographic coverage and overlap is adequate and definition is good. The side lap in T-11495 is quite small, and to the eastward there is none.

The following photographs were tilted, but no tilt determination was made: 45396, 45400, 45414 and 45416.

Respectfully submitted
23 March 1955

Frank J. Warca
Frank J. Warca
Supervisory Cartographer

PHOTOGRAMMETRIC PLOT REPORT
PROJECT PH- 117
SURVEYS T-11492, T-11493, T-11494
T-11496, T-11497, T-11498
T-11500, T-11501, T-11502

21. AREA COVERED

This radial plot report covers: (1) The entire area of Surveys Nos. T-11493, T-11497, T-11500 and T-11501; (2) The portions of Surveys Nos. T-11492 and T-11496 which are covered by photography; (3) The western portions of Surveys T-11494 and T-11498; (4) The south west corner of Survey No. T-11502.

Another radial plot report for Hetta Inlet deals with the portions of Surveys Nos. T-11494, T-11498, and T-11502 which are east of the limits of this plot.

This radial plot is for shoreline surveys located along Sukkwan Strait, South Pass, North Pass, Tlevak Strait, and Soda Bay, near the southern end of Prince of Wales Island, Alaska.

22. METHOD - RADIAL PLOT

Map Manuscripts:

Vinylite sheets with polyconic projections in black and Universal Transverse Mercator, Alaska, Zone 8, grids in red, at a scale of 1:10,000 were furnished by the Washington office.

The positions of all control and substitute stations were plotted on the manuscripts using the beam compass and meter bar.

A sketch showing the layout and the distribution of control and photograph centers is attached to this report.

Photographs:

Single lens photographs taken 4 June, 1954 with the "O" camera at a scale of 1:27,500 and ratioed to a scale of 1:10,000 were used in this plot.

Thirty-nine single lens photographs were used, numbered as follows:

- 54-0-32 thru 40
- 54-0-43 thru 61
- 54-0-63
- 54-0-75 thru 77
- 54-0-219 thru 225

Templets:

Vinylite templets were made for all photographs. The master templet was used to make adjustments for film and paper distortion.

Closure and adjustment of control:

Vinylite base sheets were prepared in this office. All control was transferred to the base sheets from the manuscripts.

Supplementary pass points established in a 1:20,000 scale radial plot of the area was transferred graphically to the 1:10,000 scale base sheets. This was done by means of transparent templets made for each point to be transferred. Four rays were drawn radially from the point through the grid intersections on the 1:20,000 base sheets. Then the templet was oriented over the corresponding grid intersections on the 1:10,000 base sheets and the point pricked through to the base sheet.

For additional information about this supplementary control see the photogrammetric plot report for the 1:20,000 radial plot of the area with 9-lens photographs.

The plot was laid in three parts. The first part extended from ROUND, 1908-14 northwest along Sukkwan Strait to ROW, 1925. This includes all of Survey T-11501 and parts of T-11498 and T-11502 in this area, in addition to control identified in the field, some stations were identified in this office by referring to the descriptions.

This portion of the plot started with photographs 54-0-43 and 54-0-62 holding to ROUND, 1908-14 and pass points established in a radial plot for Surveys T-9435, to the south. The flight of photographs Nos. 54-0-43 through 54-0-48 was laid first because it was a continuous flight. Photographs 54-0-63, 61, and 60 were then laid. There was less than 50% overlap between photographs 58 and 59, and 59 and 60. Therefore, this flight was not continuous and could be laid holding only to the few common points established by the other flight. Both of these flights, however were tied in to ROW, 1925. After these flights were laid photographs 54-0-75 through 77 were laid holding to BRETT, 1908-14. This was done at that time to establish sufficient points to compile Survey No T-11501 in its entirety.

The second part of this radial plot consisted only of laying photographs 54-0-37 through 54-0-40 which are on Survey T-11500. These were laid holding to points established by the photographs 54-0-47 and 48 in the first part of the plot and to control stations which were identified in the office.

The third part of the plot was an extension of the three flights of single lens photographs northwestward into the area where the only control was that established in the 1:20,000 scale radial plot. It was extremely difficult to get a tight plot chiefly because of insufficient overlap between photographs in line of flight. Specifically, breaks occur in all three flights at the following places:

- Between photographs 54-0-48 and 49;
- " " 54-0-58 and 59;
- " " 54-0-59 and 60; and in the flight from 54-0-32 through 40 all of the centers are in water areas except photographs 34, 39, and 40.

A tight plot in this area was finally achieved after considerable adjustment between the three flights. In this area, substitute station SUN, 1927 was held. Of the supplementary control points transferred from the 1:20,000 radial plot about two-thirds of them were held within 0.5 mm. This can be attributed to three causes: (1) The points selected

on the 1:20,000 photographs are not exactly the same as those on the 1:10,000 photographs, (2) In transferring the points from a 1:20,000 scale to a 1:10,000 scale discrepancies occurred; (3) The points are the product of two different plots using different photographs and base sheets.

Finally after the three flights were laid; the flight numbered 54-0-219 through 225 was laid. No great difficulty was encountered here, although again a break occurred in the flight line where photograph 54-0-221 and 222 did not have 50% overlap along the flight line.

The positions of all the pass points and photograph centers in the area north of ROW, 1925 and FORT, 1908-25 are weak. It is difficult to estimate how far off the points may be on Survey T-11493 and the areas immediately adjacent. It is felt, however, that they are not in error by more than 1.5mm.

Transfer of points:

The positions of all photograph centers and pass points were transferred to the manuscripts by superimposing the manuscripts on the plot and matching common grid intersections. All the supplementary control points were treated as pass points; i.e. where the positions of the points established in the 1:20,000 scale plot were not held, the positions established in this 1:10,000 scale plot were shown on the manuscript.

23. ADEQUACY OF CONTROL

With the points established in the 1:20,000 plot, the control should have been adequate, however, because of the inadequate 1:10,000 photography too much dependance had to be placed on the control from the 1:20,000 plot. If more of the established control had been identified in the field along the 54-0-32 through 40 flight then that flight could have been strengthened and the plot extended to the east to hold the supplemental 1:20,000 control points.

All of the control identified in the field was held except Sub Pt. "B" ROUND, 1908-14. The radially plotted position of Sub Pt. "B" is 0.7mm N of the plotted position. Sub Pt. "A" was held.

Of the 17 control stations identified in this office from descriptions, 10 were held within 0.5mm and all but two were off less than 1.0mm.

24. SUPPLEMENTAL DATA

Supplementary control established in a 1:20,000 scale radial plot was used as control for this radial plot Reference should be made to the 1:20,000 scale plot report for Surveys Nos. T-11492 thru T-11502.

25. PHOTOGRAPHY

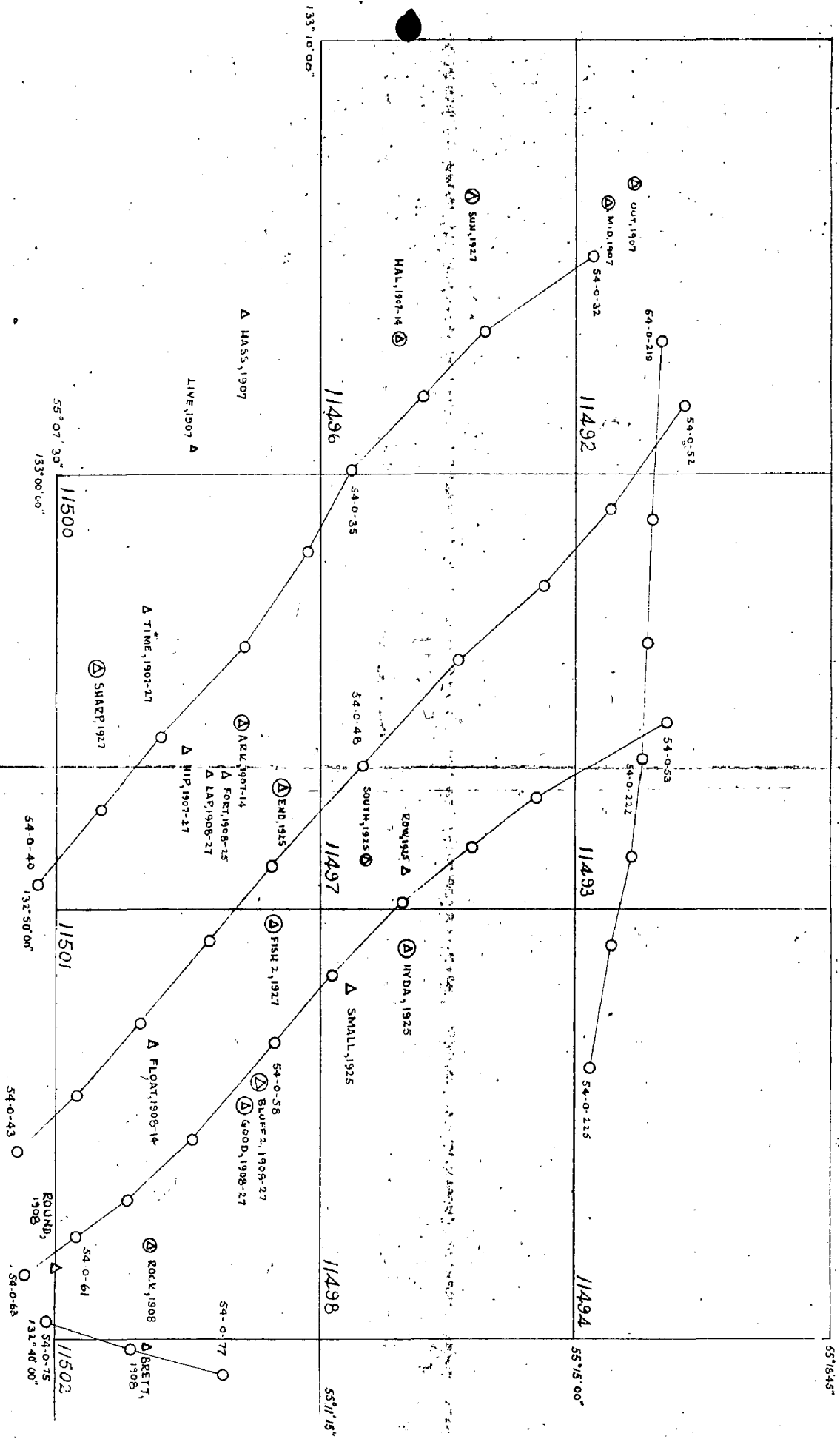
The photography was inadequate in that too many of the photographs had less than 50% overlap in line of flight,. In some areas definition

was poor; quite possibly because of the enlargement process.

Respectfully submitted
14 March, 1955

E. L. Williams
E.L. Williams
Carto. Photo. Aid *E.L.*

LAYOUT SKETCH
 PROJECT - PH 117
 SURVEYS: T-11492 thru T-11494, T-11496 thru T-11498, &
 T-11500 thru T-11502



- △ Control stations (Identified)
- △ Control stations (office identified)
- Control stations not held in plot
- Single lens office photographs

MAP T-11496 PROJECT NO. Ph-117 SCALE OF MAP 1:10,000 SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR ψ -COORDINATE LONGITUDE OR x -COORDINATE		DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS		DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS (BACK)
			ϕ	λ	FORWARD	(BACK)		FORWARD	(BACK)	
ABLE ECCENTRIC, 1958	Field Comp.	N. A. 1927	55	13	59.746			1847.6	(7.9)	
			133	05	39.626			700.3	(360.1)	
LIKOF, 1958	"	"	55	14	56.412			1744.5	(111.0)	
			133	02	28.946			511.4	(548.6)	
LIVELY ISLAND LIGHT, 1958	"	"	55	13	44.341			1371.2	(484.3)	
			133	04	57.752			1020.8	(39.7)	
NATAL, 1958	"	"	55	14	18.884			584.0	(1271.5)	
			133	01	56.828			1004.2	(56.1)	
FIRST, 1958	"	"	55	14	53.188			1644.8	(210.7)	
			133	01	46.706			825.2	(234.9)	
Sub. Pt. FIRST, 1958	"	"	55	14				1645.5	(210.0)	
			133	01				836.8	(223.3)	
SODA, 1958	"	"	55	14	30.115			931.3	(924.2)	
			133	01	00.088			1.6	(1058.6)	
Sub. Pt. SODA, 1958	"	"	55	14				945.3	(910.2)	
			133	00				1024.3	(35.9)	
WALES, 1958	"	"	55	14	33.722			1042.9	(812.6)	
			133	00	09.356			165.3	(894.8)	
Sub. Pt. WALES, 1958	"	"	55	14				1034.4	(821.1)	
			133	00				171.9	(888.2)	
STEEP, 1958	"	"	55	12	12.256			379.0	(1476.5)	
			133	00	48.040			849.6	(211.5)	
Sub. Pt. STEEP, 1958	"	"	55	12				399.3	(1456.2)	
			133	00				820.4	(240.7)	

1 FT. = 3048005 METER

COMPUTED BY: F. J. Tarcza

DATE: 10 June 1958

CHECKED BY: R. Glaser

DATE: 6/23/58

COM-DC-5784

MAP T. 11496

PROJECT NO. Ph-117

SCALE OF MAP 1:10,000

SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR y -COORDINATE LONGITUDE OR x -COORDINATE		DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS		DATUM CORRECTION	N.A. 1927 - DATUM		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)
			\circ	$'$	FORWARD	(BACK)		FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)	FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)	
GONE, 1907	G-609 p. 240	N.A. 1927	55	14	36.948			1142.6	(712.9)	
BUM, 1907	"	"	133	06	04.936			87.2	(972.9)	
ABLE, 1907	"	"	55	14	11.809			365.2	(1490.3)	
SUN, 1907	G-609 p. 243	"	133	05	17.849			315.4	(744.9)	
REEF, 1907	"	"	55	14	00.083			2.6	(1852.9)	
NORTH BAY, NORTH BASE, 1907	G-609 p. 239	"	133	05	39.678			701.2	(359.2)	
NORTH BAY, SOUTH BASE, 1907	G-609 p. 240	"	55	13	46.871			1449.5	(406.0)	
FAR, 1907	G-609 p. 239	"	133	05	44.468			786.0	(274.5)	
GUIDE, 1907	"	"	55	13	39.004			1206.2	(649.3)	
EAST, 1907	"	"	133	04	59.625			1053.9	(6.6)	
MOON, 1907	G-609 p. 240	"	55	13	18.029			557.5	(1298.0)	
HAL, 1907-14	G-609 p. 239	"	133	06	01.918			33.9	(1026.8)	
			55	13	05.754			177.9	(1677.6)	
			133	06	20.568			363.6	(697.2)	
			55	13	00.701			21.7	(1833.8)	
			133	05	38.946			688.6	(372.2)	
			55	12	59.934			1853.5	(2.0)	
			133	04	13.675			241.8	(819.0)	
			55	12	59.968			1854.5	(1.0)	
			133	05	49.361			872.8	(188.1)	
			55	12	47.139			1457.8	(397.7)	
			133	06	08.891			157.2	(903.7)	
			55	12	32.872			1016.6	(838.9)	
			133	02	21.191			374.7	(686.3)	

*Stations and
not found lost
presumed*

COMPILATION REPORT
T-11496

~~The Field Inspection Report is a part of Descriptive Report,
T-11492.~~

~~The photogrammetric plot reports are a part of Descriptive Report,
T-11497.~~

31. DELINEATION

This survey was compiled by graphic methods. Nine-lens photographs, scale 1:20,000, were used with a vertical projector to supplement the single lens photography and to delineate shorelines of North Bay and Farallon Bay.

32. CONTROL

The triangulation network was extended northeastward beyond Shelikof Island into Soda Bay in 1958, after original compilation was done. Identification of these new stations verified the accuracy of the radial plot.

33. SUPPLEMENTAL DATA

A copy of Hydrographic Survey PA-1458 was available for comparison with portions of this manuscript.

34. CONTOURS AND DRAINAGE

Contours: Not applicable.
Drainage: No comment.

35. SHORELINE AND ALONGSHORE DETAILS

Shoreline delineation was by office interpretation of 1954 photographs and was verified and corrected where necessary by field inspection in 1958. Inspection in North Bay and Farallon Bay was on 1955 "W" camera photography which was not available for the original compilation. The inspection of shoreline, rocks, foul areas and offshore reefs was satisfactory but the foreshore delineation and classification is inadequate.

The incomplete manuscript showed office interpreted rock ledge in the foreshore but the existence or extent of the ledge was not verified or inspected on the field photographs.

In some places the foreshore was inspected as "P" which was assumed to be "pebbles". This was translated by the compiler to "gravel". Also, the classification "stones" was furnished by the field inspection and although it is irregular, it was used on the manuscript.

Low water lines were compiled from 1954 photographs by office interpretation. These photographs were at a very low stage of tide. Field inspection in a few places verified the accuracy of office interpretation.

The few foul areas shown are from field inspection.

36. OFFSHORE DETAILS

No comment.

37. LANDMARKS AND AIDS

The one aid to navigation appearing on this survey was located by triangulation during 1958 field season.

38. CONTROL FOR FUTURE SURVEYS

None established.

39. JUNCTIONS

Junctions are in agreement with T-11492 to the north and with T-11497 to the east. There are no contemporary surveys to the west and south.

40. HORIZONTAL AND VERTICAL ACCURACY

See paragraph 32.

41 through 45:

Not applicable.

46. COMPARISON WITH EXISTING MAPS

This survey was compared with USGS Craig, Alaska quadrangle, scale 1:250,000, 1952 edition.

47. COMPARISON WITH NAUTICAL CHARTS

Comparison was made with chart 8151, 1929 edition, corrected to 6/9/52, scale 1:40,000.

Items to be applied to nautical charts immediately:

None

Items to be carried forward:

None

Respectfully submitted
11 September 1958

Frank J. Tarcza
Frank J. Tarcza
Super. Carto. (Photo.)

Approved and forwarded

William F. Deane
William F. Deane,
CDR C&GS
Baltimore District Officer

August 17, 1970

GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-117 (Alaska)

T-11496

Cayman Point
Dall Island
Farallon Bay
Guide Island
Halibut Nose
Hassler Point
Lively Islands
Natalia Island
Natalia Point
North Bay
Prince of Wales Island
Round Island
Shelikof Island
Soda Bay
Tlevak Strait

Approved by:



A. Joseph Wraight
Chief Geographer

Prepared by:



Frank W. Pickett
Cartographic Technician

9-26-58

50-

PHOTOGRAMMETRIC OFFICE REVIEW

T. 11496

- 1. Projection and grids
- 2. Title
- 3. Manuscript numbers
- 4. Manuscript size

4a. Classification label

CONTROL STATIONS

- 5. Horizontal control stations of third-order or higher accuracy
- 6. Recoverable horizontal stations of less than third-order accuracy (topographic stations)
- 7. Photo hydro stations
- 8. Bench marks
- 9. Plotting of sextant fixes
- 10. Photogrammetric plot report
- 11. Detail points

ALONGSHORE AREAS

(Nautical Chart Data)

- 12. Shoreline
- 13. Low-water line
- 14. Rocks, shoals, etc.
- 15. Bridges
- 16. Aids to navigation
- 17. Landmarks
- 18. Other alongshore physical features
- 19. Other along-shore cultural features

PHYSICAL FEATURES

- 20. Water features
- 21. Natural ground cover
- 22. Planetable contours
- 23. Stereoscopic instrument contours
- 24. Contours in general
- 25. Spot elevations
- 26. Other physical features

CULTURAL FEATURES

- 27. Roads
- 28. Buildings
- 29. Railroads
- 30. Other cultural features

BOUNDARIES

- 31. Boundary lines
- 32. Public land lines

MISCELLANEOUS

- 33. Geographic names
- 34. Junctions
- 35. Legibility of the manuscript
- 36. Discrepancy overlay
- 37. Descriptive Report
- 38. Field inspection photographs
- 39. Forms

40. R. Plam
Reviewer

Joseph Steinberg
Supervisor, Review Section of Unit

41. Remarks (see attached sheet)

FIELD COMPLETION ADDITIONS AND CORRECTIONS TO THE MANUSCRIPT

42. Additions and corrections furnished by the field completion survey have been applied to the manuscript. The manuscript is now complete except as noted under item 43. *Information is not available.*

Compiler

Supervisor

43. Remarks:

Review Report T-11496
Shoreline Mapping

August 1970

61. General Statement

Differences in some rock elevations were found between photogrammetric survey T-11496 and hydrographic surveys 8455 and 8457 (refer to Summary, "Rock Elevations"). These elevations were removed from T-11496. *page 7*

The following data was used during final review:

- Field photographs 55-W-0-9711 thru 9713
- 55-W-0-9098 and 9100
- 54-W-0-32 and 35
- Graphic Control Surveys Patt-58-B and C.

62. Comparison with Registered Topographic Surveys

Comparison was made with T-3314, 1:20,000 scale, dated 1912 and T-3376, 1:10,000 scale, dated 1912. These surveys are superseded for charting by T-11496.

63. Comparison with Maps of Other Agencies

Comparison was made with USGS Craig (A-4), Alaska, quadrangle, scale 1:63,360, 1948 edition. No significant differences were found in the comparison.

64. Comparison with Contemporary Hydrography Surveys

Survey T-11496 was used as a base for new hydrography. The contemporary hydrographic surveys 8455 (unverified) 1:10,000 scale, dated 1960, 8457 (unverified), 1:10,000 scale, dated 1958 and 8458, 1:10,000 scale, dated 1958 were used for comparison. There is no contemporary survey covering the southern portion of T-11496.

The agreement is good, except for a rock omitted on H-8458. The rock is on the edge of a reef and bares two feet at MHW (field photograph 54-0-32). The approximate location is between latitude 55°14'00"-55°14'30" and longitudes 133°05'30"-133°06'00". A "Notes to the Reviewer" page is inserted in the Descriptive Report for H-8458.

-2-

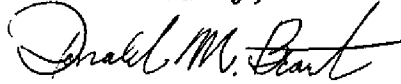
65. Comparison with Nautical Charts

Comparison was made with Chart 8151, 1:40,000 scale, 9th Edition, corrected to February 26, 1968. No significant differences were found in the comparison.

66. Adequacy of Results and Future Surveys


(Refer to Summary, "Map Accuracy.") - page 6

Reviewed by,



Donald M. Brant

Approved by,


Chief, Photogrammetric Branch


Chief, Photogrammetry Division

