11492

11492

Form 504

U. S. DEPARTMENT OF COMMERCE

COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Type of Survey Shoreline (Photogrammetric)

Field No. Ph-117 *Office No.* T-11492

LOCALITY

State ALASKA

General locality Tlevak Strait

Locality Ulloa Island to Shelikof Island

1954 - 1958

CHIEF OF PARTY

F. X. Popper, Chief of Field Party
William F. Deane, Baltimore District Officer

LIBRARY & ARCHIVES

DATE

COMM-DC 61300

DESCRIPTIVE REPORT - DATA RECORD

T - 11492

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

Field Office (II): Ship PATTON Chief of Party: F. X. Popper

Photogrammetric Office (III) Baltimore, Md. Officer-in-Charge: William 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): MID, 1907

Lat.: 55° 15' 14.761" (456.5 m) Long.: 133° 05' 51.264" (905.5 m) Adjusted ~~Unadjusted~~

Plane Coordinates (IV): State: Alaska - UTM Zone: 8

Y= X=

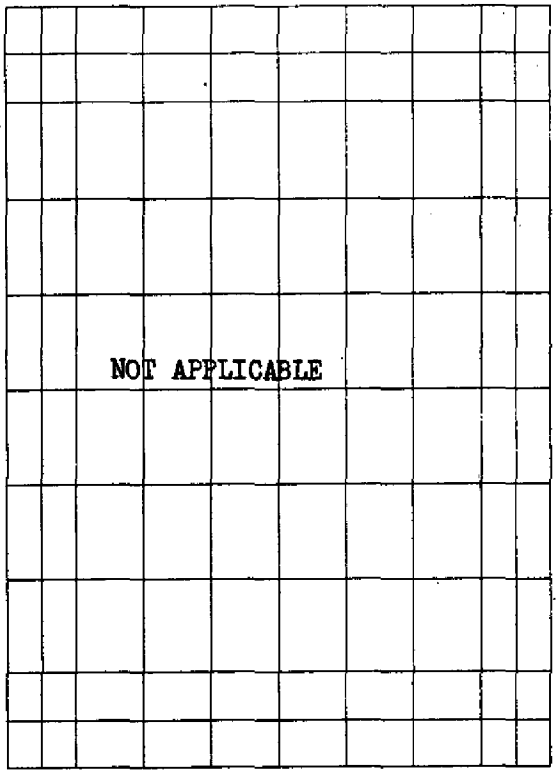
Roman numerals indicate whether the item is to be entered by (II) Field Party, (III) Photogrammetric Office, or (IV) Washington Office.

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

FORM 181a
(4-23-54)

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT - DATA RECORD



Areas contoured by various personnel
(Show name within area)
(II) (III)

FORM 181b
(4-23-54)

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT - DATA RECORD

Field Inspection by (II): K. W. Jeffers — Date: 1958 Field Season

Planetable contouring by (II): — Date:

Completion Surveys by (II): — Date:

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

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 or Stereoscopic Control extension by (III): E. L. Williams, F. J. Tarcza — Date: 3/14/55, 10/1/58

Stereoscopic Instrument compilation (III): Planimetry — Date:

Contours — Date:

Manuscript delineated by (III): J. B. Phillips, J. Honick — Date: 10/14/58

Photogrammetric Office Review by (III): R. Glaser — Date: 10/20/58

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

DESCRIPTIVE REPORT - DATA RECORD

Camera (kind or source) (III): Single lens "O" and "W" cameras

PHOTOGRAPHS (III)

Number	Date	Time	Scale	Stage of Tide
54-O-32	6/4/54	1039	1:10,000	1.8' below MLLW
54-O-219	"	1634	"	12.2' above MLLW
55-W-9090 & 9091	8/6/55	1139	"	4.0' above MLLW
55-W-9095 & 9096	"	1146	"	4.6' above MLLW
55-W-9711 thru 9714	9/22/55	1207	"	4.6' above MLLW

Tide (III)
From Predicted Tables

	Ratio of Ranges	Mean Range	Spring Range
Reference Station: Sitka, Alaska		7.7	9.9
Subordinate Station: Tlevak Narrows		11.0	13.1
Subordinate Station:			

Washington Office Review by (IV): O. M. BRANT Date: JUNE 1970

Final Drafting by (IV): Date:

Drafting verified for reproduction by (IV): Date:

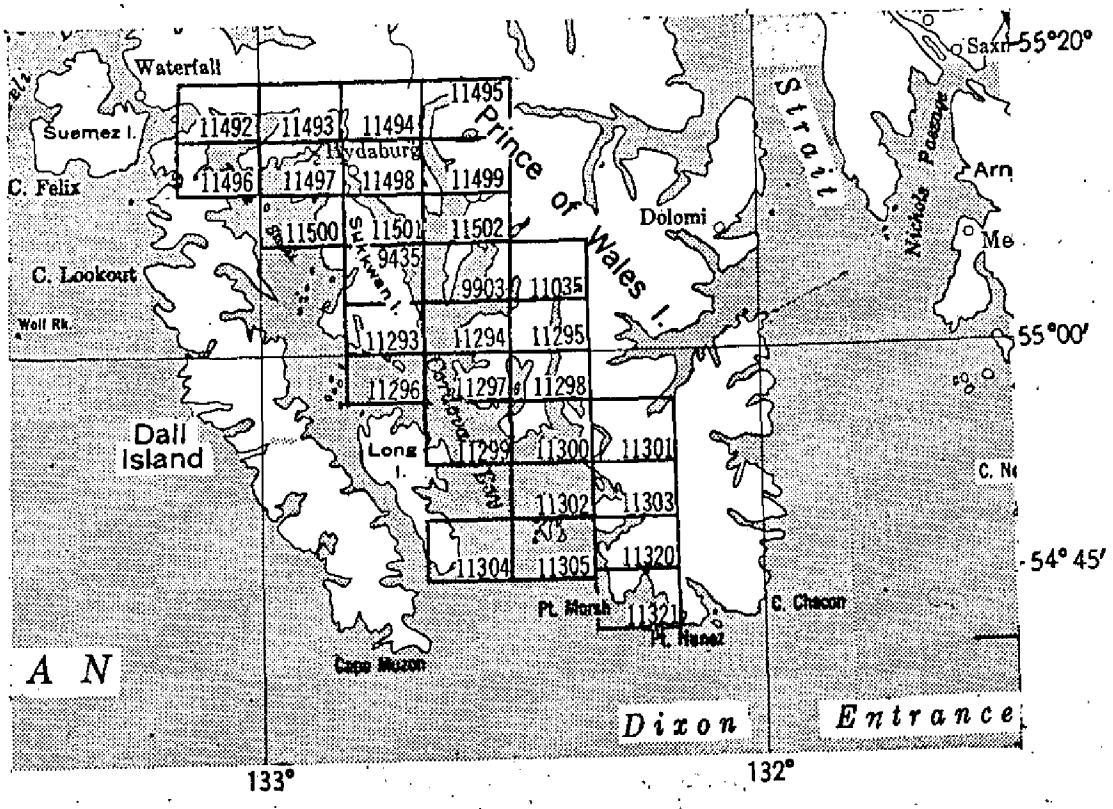
Proof Edit by (IV): Date:

Land Area (Sq. Statute Miles) (III):
Shoreline (More than 200 meters to opposite shore) (III): 32
Shoreline (Less than 200 meters to opposite shore) (III): 5
Control Leveling - Miles (II):
Number of Triangulation Stations searched for (II): 13 Recovered: 7 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: Also one station established: BLOCK ISLAND LIGHT, 1958

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
9903	21	21
11035	9	9
11293	20	20
11294	15	15
11295	13	13
11296	14	14
11297	21	21
11298	23	23
11299	16	16
11300	31	31
11301	7	7
11302	18	18
11303	14	14
11304	12	12
11305	37	37
11320	24	24
11321	20	20
11492	24	24
11493	12	12
11494	2	2
11495	16	16
11496	17	17
11497	26	26
11498	8	8
11499	11	11
11500	27	27
11501	17	17
11502	15	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

Second Order	Third Order (Intersection)
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 triangulation 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 planetable 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 northeastward 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 templets. A templet 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 con 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

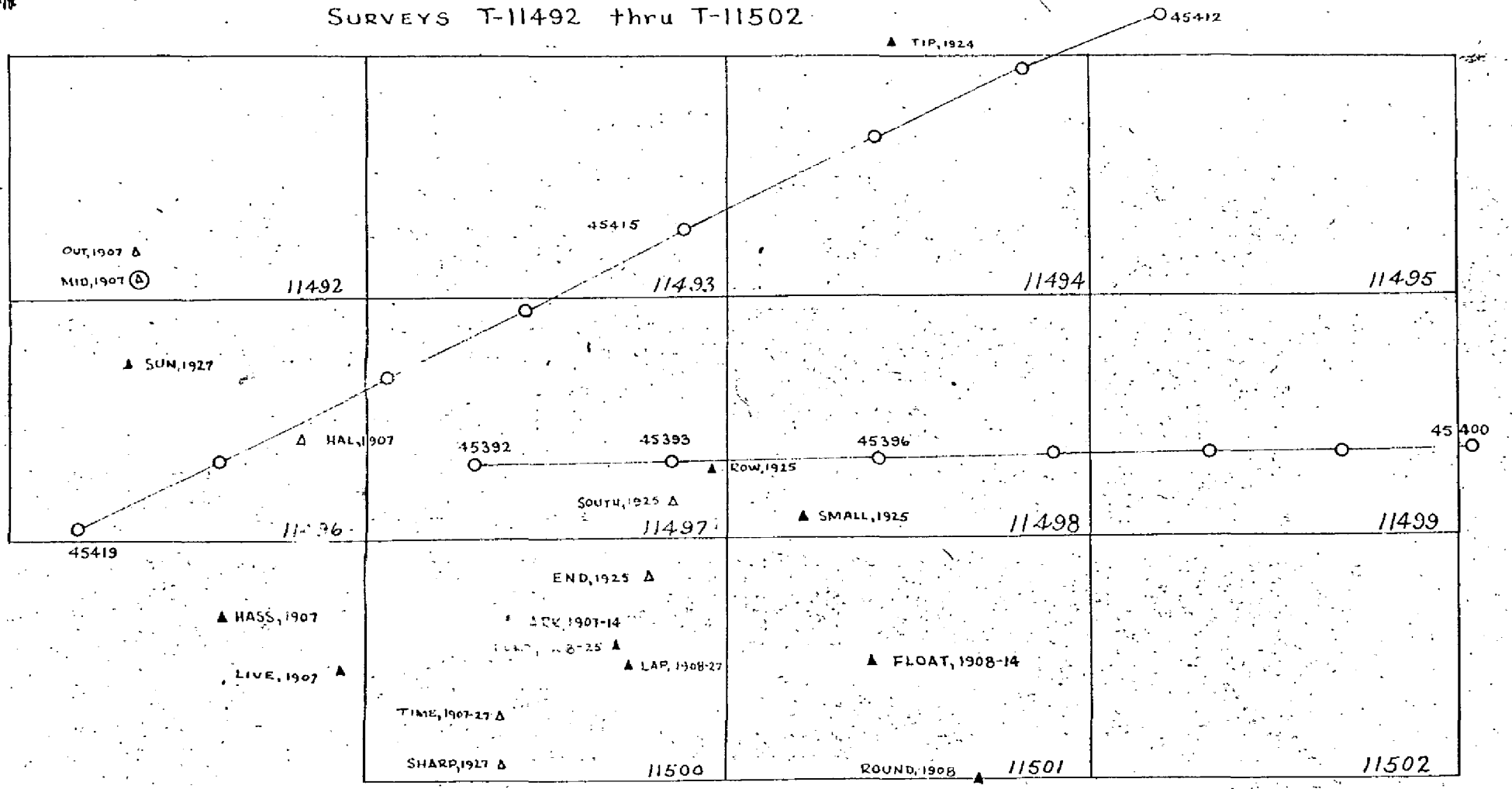
Frank J. Tarcza

Frank J. Tarcza
Supervisory Cartographer

LAYOUT SKETCH

PROJECT. PH-117

SURVEYS T-11492 thru T-11502



○ Nine-lens office photographs

▲ Control stations (identified)

Δ Control stations (office identified)

Ⓐ Control stations not held in plot

PHOTOGRAMMETRIC PLOT REPORT
PROJECT PH- 117
SUVREYS 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 Mercater, 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-O-32 thru 40
54-O-43 thru 61
54-O-63
54-O-75 thru 77
54-O-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 SukkwanStrait 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 occured 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
Carto. Photo. Aid

SUPPLEMENTARY
Photogrammetric Plot Report
Project Ph-117

Surveys T-11493, T-11494, T-11497, T-11498, T-11500 & T-11501

During the 1956 field season the triangulation network was extended northward from Hydaburg with 30 new stations. 22 of these were identified, as well as 17 existing control stations. All new control and identified points were plotted and used to verify the radial plot.

Except at stations PASS, 1925 and END,1925, where minor local corrections in shoreline were needed, and in the Hydaburg area, the radial plot was found to be reasonably accurate in position. In the northern part of Natzuhini Bay, where the radial plot was considered weakest, the error was only about 0.3 mm.

At Hydaburg, Survey T-11498, the entire area from POINT, 1925 to HOOK, 1956 was moved northerly about 0.6 mm. The adjustment was made using the photographs under the map manuscript. It was not considered necessary to make templets and reassemble the radial plot.

Respectfully submitted
June 1957

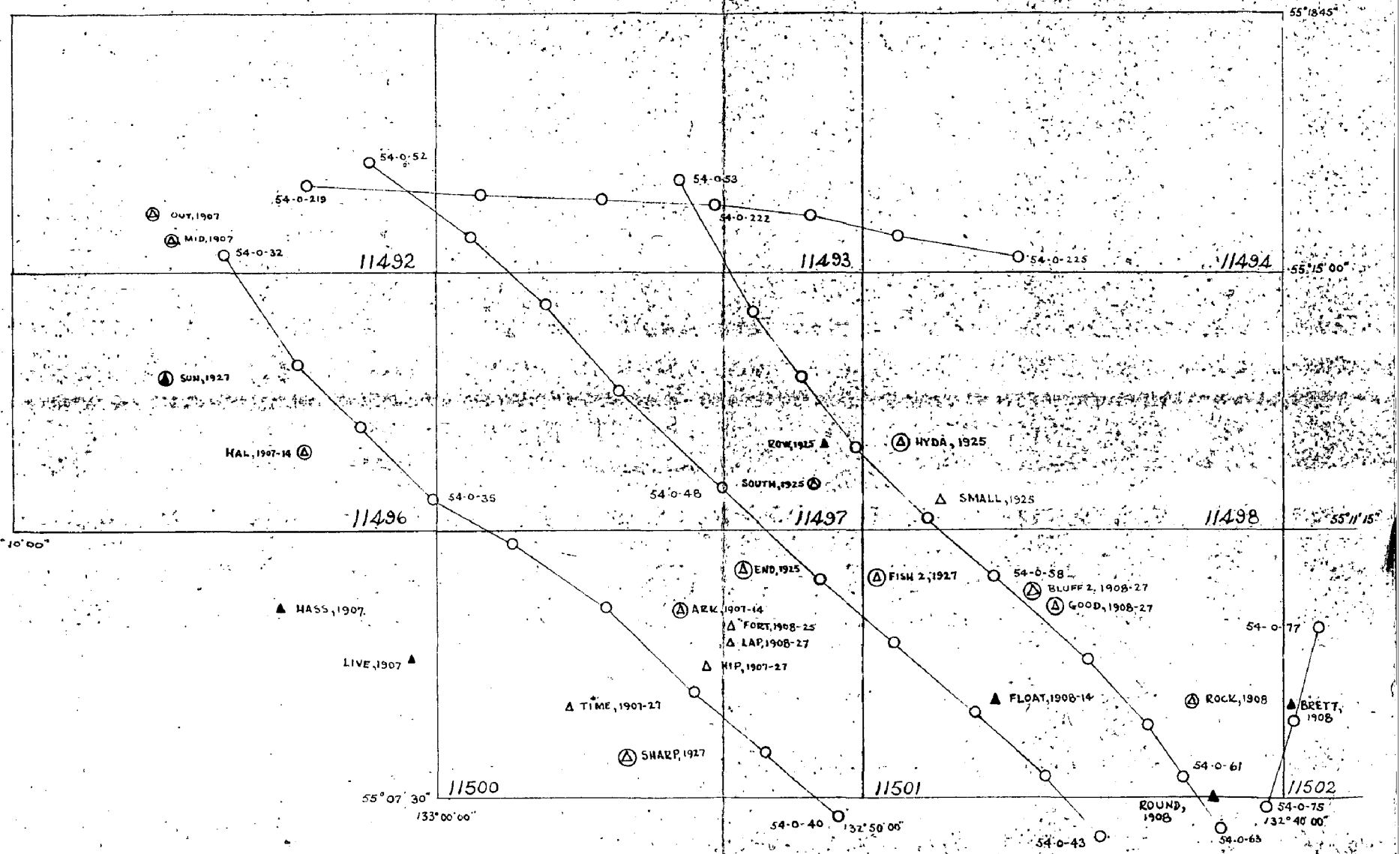
Elmer L. Williams

Elmer L. Williams
Carto. (Photo.)

LAYOUT SKETCH

PROJECT - PH 117

SURVEYS: T-11492 thru T-11494, T-11496 thru T-11498, & T-11500 thru T-11502



SUPPLEMENTARY PHOTOGRAMMETRIC PLOT REPORT

T-11492

The area of this survey northeast of BLOCK ISLAND LIGHT, 1958, at Tlevak Narrows, was not included in the original plot because of lack of photographic coverage.

In 1958, four additional control stations were identified on 1955 photography, CEDAR, 1907; SAW, 1907; MID, 1907 and MOSS, 1907. Using these stations and holding the original radial plotted positions southeast of Tlevak Narrows, a small radial plot was constructed using seven new photographs, No. 55-W-9090, 9091, 9094 thru 9096, 9713 and 9714. All control was held.

The plot was constructed on a base sheet to which all control stations and positions from the previous radial plot had been transferred. Vinylite templets were used.

Positions of photograph centers and pass points were transferred to the map manuscript by superimposing it on the completed plot and matching common grids.

Photograph 55-W-9090 was partly covered by clouds but otherwise the quality of photography was good.

Respectfully submitted
1 October 1958

Frank J. Tarcza

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

FORM 164
(4-23-54)

U.S. DEPARTMENT OF COMMERCE COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT CONTROL RECORD

MAP T- 11492 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 FORWARD (BACK)	DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)	FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)
SAW, 1907	G-609 p. 241	N.A. 1927	55 16 12.173			376.5 (1479.0)	
			133 08 58.830			1038.8 (20.6)	
MOSS, 1907	"	"	55 16 00.290			9.0 (1846.5)	
			133 09 13.210			233.3 (826.2)	
LOG, 1907	"	"	55 15 47.439			1467.1 (388.4)	
			133 08 45.150			797.4 (262.2)	
CABIN, 1907	"	"	55 16 15.360			475.0 (1380.5)	
			133 07 42.474			749.9 (309.5)	
MID, 1907	G-609 p.240	"	55 15 14.761			456.5 (1399.0)	
			133 05 51.264			905.5 (154.4)	
Sub. Pt. MID, 1907		"	55 15			454.6 (1400.9)	
			133 05			910.1 (149.8)	
BLOCK ISLAND LIGHT, 1958	Field Comp.	"	55 15 46.694			1444.0 (411.5)	
			133 06 55.517			980.5 (79.2)	
CEDAR, 1907	G-609 p.241	"	55 16 11.369			351.6 (1503.9)	
			133 10 02.779			49.1 (1010.3)	
Sub. Pt. CEDAR, 1907		"	55 16			422.4 (1433.1)	
			133 10			79.4 (980.0)	

1 FT. = .3048006 METER

COMPUTED BY: Steinberg F. J. Tarcza DATE: 11/8/54 6/18/58

CHECKED BY: B. Wilson R. Glaser DATE: 12/1/54 6/23/58

COMM-DC-5784

COMPILATION REPORT
T-11492

~~The photogrammetric plot reports for the area east of Tlevak Narrows are a part of Descriptive Report, T-11497.~~

The supplementary plot report for the remainder of the survey is included in this report ~~(see page 12)~~.

31. DELINEATION

This survey was compiled by graphic methods. Delineation east of Tlevak Narrows was done by office interpretation of 1954 photography and was verified or corrected where necessary by field inspection in 1958 on photographs taken in 1955. The remainder was compiled using 1955 photography after field inspection.

32. CONTROL

The identification, density and placement of control are adequate.

33. SUPPLEMENTAL DATA

A copy of hydrographic survey PA-1458 was available for the area of Tlevak Strait and Tlevak Narrows between Midway Island and Meares Island.

34. CONTOURS AND DRAINAGE

Contours: Not applicable.
Drainage: No comment.

35. SHORELINE AND ALONGSHORE DETAILS

Shoreline inspection was adequate.

Low water lines were compiled from 1954 photography for the eastern part of this survey. These photographs were taken at a very low stage of tide.

The foul lines were field inspected.

Classification of foreshore, and especially the extent of rock ledge which was office interpretated, was not complete.

36. OFFSHORE DETAILS

No comment.

37. LANDMARKS AND AIDS

BLOCK ISLAND LIGHT was located by triangulation during 1958 field season. It is the only aid to navigation within the survey.

38. CONTROL FOR FUTURE SURVEYS

None established.

39. JUNCTIONS

Junctions are in agreement with T-11493 to the east and T-11496 to the south. There are no contemporary surveys to the north and west.

40. HORIZONTAL AND VERTICAL ACCURACY

No comment.

41 - 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, scale 1:40,000, edition of 1929 corrected to 6/9/52.

Items to be applied to nautical charts immediately: None.
Items to be carried forward: None.

Respectfully submitted
15 October 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-11492

Block Island

Bush Islets

Dall Island

Ice Bay

Midway Island

Prince of Wales Island

Shelikof Island

Soda Bay

Tlevak Narrows

Tlevak Strait

Turn Point

Ulloa Channel

Ulloa Island

Approved by:

A. Joseph Wraight
Chief Geographer

Prepared by:

Frank W. Pickett
Cartographic Technician

10-20-58 -27

FORM 182
(6-12-56)

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

50-

PHOTOGRAMMETRIC OFFICE REVIEW

T- 11492

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) X 7. Photo hydro stations X 8. Bench marks X
9. Plotting of sextant fixes X 10. Photogrammetric plot report ✓ 11. Detail points ✓

ALONGSHORE AREAS

(Nautical Chart Data)

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

PHYSICAL FEATURES

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

CULTURAL FEATURES

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

BOUNDARIES

31. Boundary lines X 32. Public land lines X

MISCELLANEOUS

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

40. R. Glaser
Reviewer

Joseph Steinberg
Supervisor, Review Section or 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:

COMM-DC 34529

Review Report T-11492
Shoreline Mapping

August 1970

61. General Statement

Differences in some rock elevations were found between T-11492 and H-8457 and 8458 (refer to Summary, "Rock Elevations" page 7). These elevations were removed from T-11492.

The following field data was used during final review:

Field photographs 55-W-9090 and 55-W-9711 thru 9714.
Graphic control surveys PATT 58-B, C and D.

62. Comparison with Registered Topographic Surveys

Comparison was made with T-3376, 1:10,000 scale, dated 1912. This survey is superseded for charting by T-11492.

63. Comparison with Maps of Other Agencies

Comparison was made with USGS Craig (B-4), Alaska, quadrangle 1:63,360 scale, dated 1951. No significant discrepancies were found in the comparison.

64. Comparison with Contemporary Hydrographic Surveys

Photogrammetric survey T-11492 was used as a base for new hydrography. The contemporary hydrographic surveys H-8457 (unverified) and H-8458, dated 1958, 1:10,000 scale, were used for comparison.

The agreement was good, except for the area north of Shelikof Island. The soundings in this area (between latitudes 55°16'00" and 50°16'30") plotted above the mean high-water line. The comparison also indicated that on the north shore of the passage the signals appear to plot in the water and on the south shore of the passage they plot on land. This can be due to a poor solution in the radial plot (see plot reports), high-water line (on photography) obscured by shadows and over hanging trees or an error in the location of signals. This disagreement cannot be resolved because of missing data. A "Notes to the Verifier" page covering this disagreement was inserted in the Descriptive Report for H-8457.

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

Donald M. Brant

Approved by,

Chief, Photogrammetric Branch

Jack E. Guth

Chief, Photogrammetry Division

Form 567
April 194

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

NONFLOATING AIDS ~~OR LANDMARKS~~ FOR CHARTS

TO BE CHARTED / ~~TO BE DELETED~~ } STRIKE OUT ONE

Baltimore, Maryland 10 October, 1958

I recommend that the following objects which have ~~been~~ been inspected from seaward to determine their value as landmarks be charted on ~~the~~ the charts indicated.

The positions given have been checked after listing by F. J. Tarcza

William F. Deane *Chief of Party.*

STATE: ALASKA

CHARTING NAME	DESCRIPTION	SIGNAL NAME	POSITION LATITUDE* ° ′	LATITUDE* ″ D.N. METERS	LONGITUDE* ° ′	LONGITUDE* ″ D.P. METERS	DATUM	METHOD OF LOCATION AND SURVEY NO.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
				46.694		55.517		T-11492					
	BLOCK ISLAND LIGHT, 1958		55 15	1444.0	133 06	980.5	N.A. 1927	Tri.	1958		x		8151
	NOTE: Position furnished by field party. Form 567, if submitted by field party, was not available at this office.												

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *nonfloating aids* to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

* TABULATE SECONDS AND METERS

Comm-DC 28356

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