11035

11035

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey SHORELINE

Field No. 04-Q117 *Office No.* T-11035

LOCALITY

State ALASKA

General locality Cordova Bay

Locality Keete Inlet and Head of Klakas Inlet

1954 - 1955

CHIEF OF PARTY

F. R. Gossett, Chief of Field Party

J. C. Partington, Chief of Field Party

~~E. H. Kirsch, Baltimore District Officer~~

LIBRARY & ARCHIVES

DATE

B-1870-1 (1)

FORM 181
(4-23-54)

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

-/-

DESCRIPTIVE REPORT - DATA RECORD

T- 11035

Project No. (II): PH-6117 Quadrangle Name (IV):

Field Office (II): C&GS Ship HODGSON
C&GS Ship PATON

Chief of Party: F. R. Gossett, J. Bowie and J. C. Partington

Photogrammetric Office (III):

Officer-in-Charge: E. H. Kirsch

Instructions dated (II) (III):
Field: 3/17/53, 1/8/54, 1/7/55.
Office: 12/7/53, 10/11/54, 1/24/56.

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): MAR 19 1956 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): UP, 1918

Lat.: 55° 04' 11.325" (350.2m) Long.: 132° 29' 29.386" (521.5m) Adjusted

Plane Coordinates (IV): State: Alaska 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.

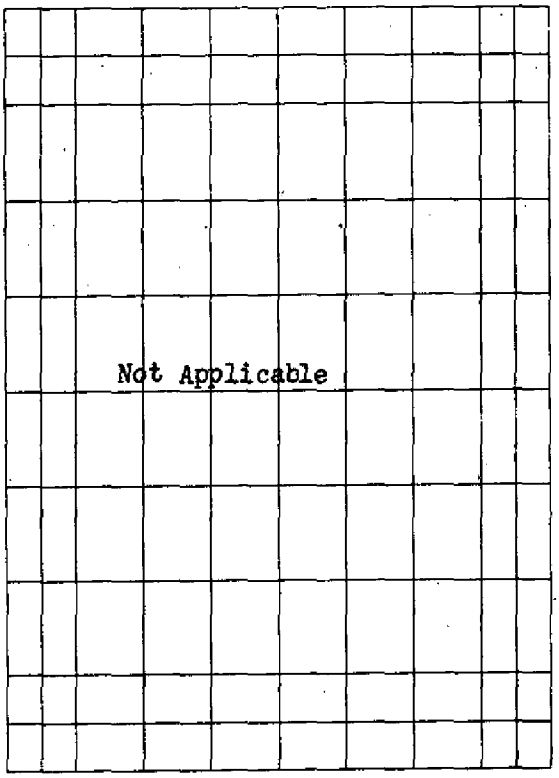
When entering names of personnel on this record give the surname and initials, not initials only.

COMM-OC-57842

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): D. L. Campbell, A. C. Haglund
R. C. Munson, J. J. Dermody
N. C. Russell, F. J. Tucker

Date: 1953 field season
1954 field season
1955 field season

Planetable contouring by (II):

Date:

Completion Surveys by (II):

Date:

Mean High Water Location (III) (State date and method of location): 1953 (Keete Inlet)
1954, (Klakas Inlet)
Date of photography, field inspection in 1954 and 1955.

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

Date: 1/8/54

Projection and Grids checked by (IV): H. D. Wolfe

Date: 1/8/54

Control plotted by (III): J. C. Cregan

Date: 1/20/54

Control checked by (III): R. Glaser

Date: 2/2/54

Radial Plot [redacted] H. R. Rudolph
[redacted]y (III): E. L. Williams

Date: 2/19/54
2/25/55

Stereoscopic Instrument compilation (III):
Planimetry

Date:

Contours

Date:

Manuscript delineated by (III): R. M. Whitson

Date: 3/6/~~55~~ 54
3/2/55

Photogrammetric Office Review by (III): R. Glaser

Date: 3/13/54
3/2/55
2/10/56

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

Date:

COMM-DC-57842

DESCRIPTIVE REPORT - DATA RECORD

Camera (kind or source) (III): C&GS Nine-lens and single lens camera "O"

PHOTOGRAPHS (III)

Number	Date	Time	Scale	Stage of Tide
45385 and 45386	6/4/54	1100	1:20,000	1.6' below MLLW
54-O-277 thru 279	7/6/54	1106	1:10,000	1.1' above MLLW

Tide (III)
From predicted tables

Ratio of Ranges	Mean Range	Spring Range
	7.7	9.9
1.3	10.3	12.9

Reference Station: Sitka
Subordinate Station: Hassiah Inlet
Subordinate Station:

Washington Office Review by (IV): D. M. BRANT Date: JULY 1970

Final Drafting by (IV): Date:

Drafting verified for reproduction by (IV): Date:

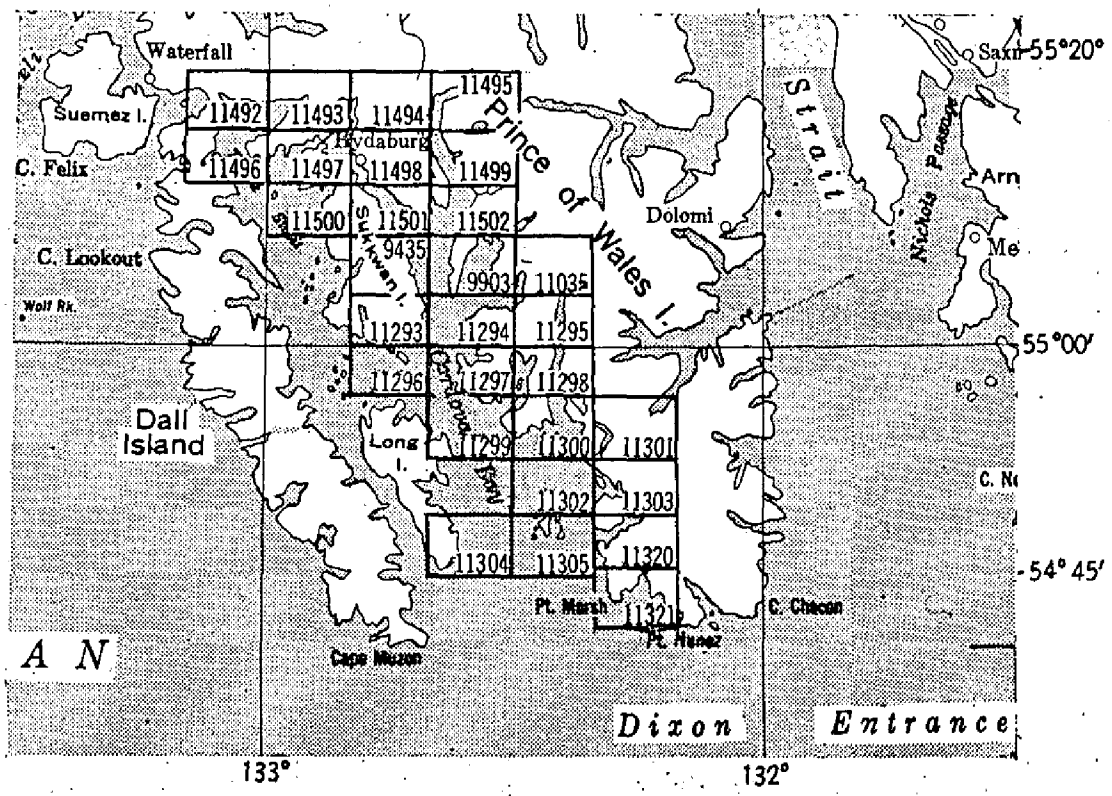
Proof Edit by (IV): Date:

Land Area (Sq. Statute Miles) (III): 0.8
Shoreline (More than 200 meters to opposite shore) (III): 7.6
Shoreline (Less than 200 meters to opposite shore) (III): 0.9
Control Leveling - Miles (II):
Number of Triangulation Stations searched for (II): 1 Recovered: 1 Identified: 1
Number of BMs searched for (II): Recovered: Identified:
Number of Recoverable Photo Stations established (III): 1
Number of Temporary Photo Hydro Stations established (III): 17

Remarks:

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

2. AERIAL FIELD INSPECTION

Control station identification was made in the main project area of Cordova Bay on the southwest side of Prince of Wales Island, and in three areas on the east side of Prince of Wales Island in accordance with instructions for Project CS-357. Shoreline inspection for this season was confined mainly to the area covered by this season's hydrographic surveys. In the areas north of Shipwreck Point, on the west side of Cordova Bay, and on the east side of Prince of Wales Island only very small amounts of shoreline inspection were done.

The Cordova Bay area is a large deep watered area with many inlets, arms, and bights that cut up the land areas. In the southern part, the Barrier Islands extend far out into the bay. The terrain in the Barrier Islands is very broken with numerous small islands and offshore rocks covering the area. A few small tidal lakes are found on several of the islands. Most of the islands are 100 to 200 feet in height. The land area in the rest of Cordova Bay is mostly rugged wooded mountains cut by deep valleys, bays and inlets.

The areas on the east side of Prince of Wales Island in which the instructions required control station identification were in or near long deep bays. These inlets have numerous small bays and arms that are in general very deep. The land areas are nearly all very mountainous with dense timber except near the summits of the highest peaks. The higher mountains inshore are very steep and rugged, and are usually bare near the summits.

There are very few cultural features in the areas covered by field inspection. In the Cordova Bay area there were only three cultural features. A small trapper's cabin was found at the old Klinkwan village site. The landmark and remains of the village have been destroyed and should be deleted from the chart. An old cannery site on the north shore of Hunter Bay is visible but no structures remain. At the northern end of the area opposite Sukkwan Strait there is an abandoned mine. This was charted as Copper City, but there are no buildings still standing.

Only control station identification was done on the east side of Prince of Wales Island. No detailed inspection of cultural features was made in this area.

The single lens photographs obtained from the Geological Survey were very poor which made field inspection difficult. These prints were very hazy and had very little contrast.

The nine lens photos were clear and had very good contrast except in areas where the suns reflection blurred them. Usually a better print could be found in these areas, but on several photographs along the west side of Cordova Bay some difficulties were encountered.

Densities and tones were not inspected on the land areas. In water areas shoals and kelp areas were easily visible on the nine lens photographs.

3. HORIZONTAL CONTROL

(a) No supplemental triangulation control was established in connection with the field inspection. Since photo compilation had not been made for the area, graphic control sheets were surveyed to control the hydrography. These

sheets should be very helpful in making the compilation. The short sections of shoreline in the vicinity of many of the stations will probably be helpful to the compiler.

Three new main scheme triangulation stations were established during the survey. These are BLACK 2, 1953; EGG 2, 1953; and DEWEY 2, 1953.

(b) All control is on N. A. 1927 datum and no datum adjustment are necessary.

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

(d) No field inspection was done this season in the vicinity of Sukkwan Strait and South Pass. This section was deferred in expectation of receiving nine-lens photographs. Then near the close of the season, work on Project CS-357 was suspended to undertake the special wire drag survey at Hollis Anchorage. A better field inspection can be made when the remaining area is covered by nine-lens photographs. The single-lens photographs provided by the Geological Survey can be considered of very little value for field inspection in this area. In this respect

(e) In the Cordova Bay area the triangulation stations that were omitted in the photo identification were omitted in accordance with Paragraph 12 of Instructions dated 17 March 1953. For stations omitted in Sukkwan Strait and South Pass see Paragraph 3(d) of this report.

The stations on the east side of Prince of Wales Island that were omitted were in accordance with Paragraph 13 of Instructions dated 17 March 1953.

The following stations were reported as lost:

NEW, 1908
GREEN, 1907
N. W. CHURCH SPIRE, 1909
OUR, 1909
CAN, 1909
TOP, 1909
FRONT, 1909
DOPE, 1909
BAD, 1909
LIME, 1905-18
HUB, 1907

Stations NEW, 1908 and GREEN, 1907 were the only two stations of the list that were photo identified. At NEW, 1908 the station mark was not found but the old blaze in tree and the rock pinnacle the station was on was found. The pinnacle is only about 4 feet in diameter which made positive identification possible. At GREEN, 1907 the old R. M. drill hole was found and identified. The station mark was not found.

For further information under this heading see Triangulation Reports, Ship HODGSON, 1953.

(f) The following horizontal control stations were identified:

STATION	PHOTO NO.	QUALITY OF IDENTIFICATION	REMARKS
WEST OF PRINCE OF WALES	NINE LENS		
ANCHOR, 1909	41015	Positive	Triangulation
ATA, 1918	41003	"	"
Axe	40991	"	Topo - 1953
BAN, 1925	40944	"	Triangulation
BARRIER, 1908	40992	"	"

STATION	PHOTO NO.	QUALITY OF IDENTIFICATION	REMARKS
BLACK 2, 1953	40991	Positive	Triangulation
BOAT, 1909-25	40985	"	"
CEDAR 2, 1908	41048	"	"
CLEO, 1909	41015	"	"
CLUMP, 1907	40999	"	"
CON, 1925	40984	"	"
COPPER 2, 1908	41048	"	"
CREEK, 1909	40993	"	"
Day	40991	"	Topo - 1953
DEWEY 2, 1953	40986	"	Triangulation
EGG 2, 1953	40986	"	"
FAR, 1909	40991	"	"
FLAT 2, 1908	41002	"	"
FOG, 1908	41002	"	"
GRASS, 1908-14	41002	"	"
GREEN, 1907	40977	"	"
HAS, 1918	41004	"	"
HEN, 1907	40977	"	"
Hip	41011	"	Topo - 1953
HUNTER, 1909	41035	"	Triangulation
JACK, 1907	40978	Doubtful	"
Jar	40992	Positive	Topo - 1953
KEET, 1918	41045	"	Triangulation
KLINKWAN, 1909	41035	"	"
LEDGE 2, 1908	40998	"	"
LITTLE, 1909	41033	"	"
MAB, 1918	41005	"	"
MARBLE 2, 1925	40983	"	"
MID, 1918	41045	"	"
MEX, 1909	40990	"	"
NEW, 1908	41000	"	"
NICE, 1907	40977	"	"
NING, 1925	40943	"	"
NUT, 1918	41002	Doubtful	"
PET, 1909	41015	Positive	"
Ram	41036	"	Topo - 1953
RHEA, 1909	41034	"	Triangulation
ROUGH 2, 1908	40982	"	"
Rut	41036	"	Topo - 1953
SHIP 2, 1908	40997	"	Triangulation
SHOE, 1907	40978	"	"
SOUTH ROCK, 1909-53	40945	"	"
TITAN, 1909	41033	"	"
Tomb	40989	"	Topo - 1953
TRIM, 1925	40979	"	Triangulation
TURN, 1909	41012	"	"
UP, 1918	41053	"	"
Vim	40991	"	Topo - 1953
WEST, 1909	40989	"	Triangulation
Yam	40991	"	Topo - 1953
Zag	40991	"	Topo - 1953
	Single Lens		
BRETT, 1908-14	SEA13-091	Doubtful	Triangulation
ROUND, 1908-14	SEA26-020	Positive	"

STATION	PHOTO NO.	QUALITY OF IDENTIFICATION	REMARKS
EAST OF PRINCE OF WALES ISLAND	Single Lens		
BARE, 1924	SEA29-042	Positive	Triangulation
BUT, 1924	SEA22-119	"	"
BEE, 1924	X15,026	"	"
BLOCK, 1912	SEA103-006	"	"
CHOP, 1924	SEA22-025	"	"
DRICK, 1912	SEA22-004	"	"
END, 1912	SEA22-009	"	"
HALLIDAY, 1912	SEA103-006	"	"
HEAD, 1922	SEA22-005	"	"
INGRAHAM, 1912-21	SEA103-004	"	"
KEN, 1921	SEA22-005	"	"
KNOB, 1924	SEA29-044	"	"
MOIRA ROCK, 1912	SEA22-135	"	"
NEST, 1912	SEA22-134	"	"
OUT, 1911	X15-026	"	"
PIT, 1924	X15,030	"	"
SCOTT, 1912	SEA15-065	"	"
SCRUB, 1924	SEA29-042	"	"
SUN, 1912	SEA103-005	"	"
TAG, 1924	SEA103-022	"	"
TIP, 1924	SEA22-025	"	"

Of the stations listed doubtful identification was made on stations: JACK, 1907; NUT, 1907; and BRETT, 1908-14. These stations are not required by the instructions since other stations in the immediate vicinity were used to meet the spacing requirements.

Station JACK, 1907 was marked doubtful because the glare of the sunlight on the photographs made positive identification difficult except to large objects.

Station NUT, 1907 was marked doubtful since overhanging trees and shadows eliminated all object that would have made good subpoints. The subpoint used was a bend in the high water mark that did not show clearly on the photograph.

Station BRETT, 1907 was identified on a single lens photograph furnished by the Geological Survey which was very dull and hazy. It was marked doubtful since the subpoints did not show clear or sharp on the photograph.

4. VERTICAL CONTROL

Not applicable.

5. CONTOURS AND DRAINAGE

Not applicable.

6. WOODLAND COVER

All land areas not covered by storm high waters were densely wooded with coniferous trees and underbrush except on very high mountains. A few offshore rocks to the south and west of the Barrier Islands were bare. A number of areas on the east side of Prince of Wales and a few areas in the Cordova Bay area had been logged out. These areas were easily seen on the nine lens photographs.

7. SHORELINE AND ALONGSHORE FEATURES

(a) Shoreline was inspected from a boat running as close inshore as was safe. The mean high water line shows clearly on the nine tone photos where shadows or overhanging trees do not obscure it. In most areas not opened to the seas the mean high water line is at the tree line. In some areas where the land protrudes up steeply from the shoreline the trees overhang it as much as 4 to 5 meters. In other areas, those open to the seas, it is usually visible on the photographs but may be as far as 50 meters from the tree line.

The mean high water line is indicated at random interval on photographs or where it is not clear.

(b) The low water line is not indicated on the photographs, although, a number of areas were marked foul when it was considered too shoal to investigate with a motor whale boat. In some cases where a number of submerged rocks were grouped together the area would be marked foul out to the kelp line.

(c) The foreshore in the vicinity of the Barrier Islands was mostly very rocky with numberous rock ledges and reefs that cover at high water. There are also many small bights with boulder, rock or gravel beaches in this area. Just north of the Barrier Islands there are many bights and small bays which have some sand beaches formed by streams that run into them.

(d) There were a few bluffs and cliffs seen over the area. None of these were marked on the photographs. However, most of them are readily identifiable on the photographs due to the lack of vegetation. They should be obvious in a stereoscopic model.

(e) In the project area where shoreline inspection was done no shoreline structures were noted other than the permanent fish trap at the mouth of Hesse Inlet. This structure was used by small fishing craft as a mooring. It was permanently secured to the beach, and had not been used as a trap for many years. It is indicated on the photograph.

8. OFFSHORE FEATURES

In the hydrographic survey area covered by field inspection important offshore features and possible dangers to navigation were indicated on the photographs. Many of the offshore rocks were located by hydrographic and/or topographic means.

In two places in the area inspected this season there were rocks that were indicated that did not show clearly on the photographs.

The first is a sunken rock in Eureka Channel about 1.1 mile NE of Far Point. In the vicinity of this rock there is a kelp area about 30 meters in diameter that appears to show on the photo. A hydrographic fix was taken on the rock and a check on its location can be obtained from the hydrographic sheet.

The second rock not clearly visible on the photographs was a rock awash about 200 meters SSE of triangulation station BIRD, 1909-53. This rock was not located by the hydrographic party, but it was noted on the photograph. It may show a little clearer on the office print. However, if a positive location cannot be made using the office prints, further hydrographic investigation is necessary.

Since the field inspection was done in conjunction with the hydrographic survey, some of the offshore features were omitted from the photographs if previously located by other methods. Although, an attempt was made to field inspect all offshore features whether they had been previously located or not.

Heights of rock were estimated in all cases. All rocks were visited, but in most cases a landing was not made. When the field inspection was made a pencil notation of the time, date, and estimated heights was made on the photographs. At the close of the day heights of rocks awash were reduced to MLLW and all notes were inked.

9. LANDMARKS AND AIDS

(a) The only landmark noted was an abandoned light on Turn Point. It is station Ram identified on photograph Number 41036. Since it is a recoverable topographic station no photo location is needed.

(b) No interior landmarks will be listed since no interior inspection was done.

(c) Inapplicable.

(d) The following fixed aids to navigation are indicated on the photographs:

AID	PHOTO NOS.	HYDROGRAPHIC NAME	REMARKS
TELEVAK STRAIT LIGHT	40978		
MELLEN ROCK LIGHT	41003		
MOUND POINT LIGHT	SEA29-044		
CENTER ISLAND DAYBEACON	40991	Zag	Topo signal
GUIDE ROCKS DAYBEACON	41033	Cab	" "
TURN ISLAND DAYBEACON	41012	TURN, 1909-53	Triang.Station
HUNTER BAY DAYBEACON	41036		
EUREKA CHANNEL DAYBEACON	40992	Jar	Topo signal

The four aids listed above that were not located should be located by photogrammetric methods. No identification cards were made for these. All four were pricked direct.

The other aids listed have been located but were identified to be used in the control of the radial plot. Guide Rocks Daybeacon was identified but no card was submitted since it is not needed for control of the plot.

(e) Inapplicable.

10. BOUNDRIES, MONUMENT, AND LINES

Inapplicable.

11. OTHER CONTROL

A number of topographic stations were identified on the photographs that were not listed as recoverable topographic stations. When these were identified no pricking cards were submitted.

The specified spacing for recoverable topographic stations was complied with in the area covered by the hydrographic survey. Listing covered under

side heading 3(f).

12. OTHER INTERIOR FEATURES

Covered under side heading 2.

13. GEOGRAPHIC NAMES

Geographic names will be covered in a separate report.

Only charted names were used in connection with records and reports.

14. SPECIAL REPORTS AND SUPPLEMENTAL DATA

Supplemental data includes other phases of field work - triangulation data, topographic data, hydrographic data and coast pilot notes.

Photogrammetric data forwarded separately:

Field photographs

Control Station Identification Cards

Data to be forwarded:

Descriptive Reports for Hydrographic Sheets:

HO-1153	HO-1353
HO-1253	HO-2153

Triangulation Report - Cordova Bay - 1953
Descriptions of Triangulation Stations
Descriptions of Recoverable Topographic Stations
Recovery Notes, Triangulation Stations
Report on Landmarks and Fixed Aids
Geographic Names Report ~~L~~ Heck 951
Coast Pilot Notes ✗

Respectfully submitted,

Donald L. Campbell,
Eng., USC&GS

Approved and forwarded:

F. R. Gossett,
CDR, USC&GS
Comdg., Ship HODGSON

FIELD INSPECTION REPORT

FOR

KEETE INLET AND APPROACHES, CORDOVA BAY

S. E. ALASKA

AUG. - SEPT. 1954

PH-117

2. Areal Field Inspection

The area covered in this report is known as Keete Inlet, located on the west side of Prince of Wales Island, and east of Lime Point. For purposes of this report, the approaches to Keete Inlet include the area east of a line drawn from triangulation station HAS, 1918 to the islet NW of Keete Entrance plus Keete Island.

There are no cultural features in the area. The only natural feature is that the land is densely wooded, except in the few areas noted on the field photographs as being grass covered.

This field inspection is standard.

The area was covered by standard nine-lens photographs (1/10,000) which gave adequate coverage except in the areas obscured by trees on all photos.

Densities and tones were not inspected on the land areas. In the water areas, shoals were easily discernable.

3, 4, 5 - Inapplicable

6. Woodland Cover

All land areas not covered by storm high water is densely wooded with coniferous trees, with the further exception of a few bare mountain tops.

7. Shoreline and Alongshore Features

(a) The shoreline was inspected from the beach at photo-hydro signal locations and from the boat in all other areas.

The mean high water line is at the bottom of the black band (one or two meters in width) which runs along the shore below the tree line.

(b) Where pertinent, the water line at MLLW was sketched on the field photos.

(c) The foreshore is rocky with boulders, with a few areas of sand and gravel at stream mouths, and at the head of small bights.

(d) The wreck shown on the photos at the head of the inlet is now completely broken up.

8. Offshore Features

All apparent offshore features were visited. The heights and depths, times and dates pertaining to each feature were noted on the field photos. All heights were estimated, all depths were measured.

There were no rocks which did not show on the photos, altho some had not been put on the MS. These were noted on the field photos.

9, 10 Inapplicable

11. Other Control

The following is the list of photo-hydro signals and the method used for their location. The information necessary for the location of the signals is on the back of the photos as listed.

SIGNAL	METHOD OF LOCATION	PHOTO NO.
Ark	Angle and distance from off. pp	41055
Col	Angle and distance from field pp	41053
Con	Angle and distance from off. pp	41045
Eye	Off. pp	41045
Gar	An le and distance from field pp	41053
Gut	Angle and distance from off. pp	41004
Ham	Angle and distance from off. pp	41045
Hi	Angle and distance from off. pp	41053
Hid	Off. pp	41045
Ile	Angle and distance from off. pp	41045
Imp	Angle and distance from pff. pp	41045
Log	Angle and distance from field pp	41053
Man	Angle and distance from off. pp	41045
Mo	Angle and distance from off. pp	41045
Pol	Off. pp	41004
Pot	Angle and distance from off. pp	41045
Pry	Field radial plot	41053
Rok	Angle and distance from off. pp	41045
Rip	Angle and distance from off. pp	41053
Rit	Off. pp	41053
Rod	Angle and distance from field pp	41045
Sis	Angle and distance from off. pp	41004
Sop	Angle and distance from off. pp	41004
Sus	Off. pp	41045
Tab	Angle and distance from off. pp	41053
Too	Angle and distance from off. pp	41004
Ump	Angle and distance from field pp	41053
Val	Angle and distance from off. pp	41045
Ver	Angle and distance from off. pp	41045

12. Inapplicable

13. Geographic Names

A special report will be forwarded at the end of the field season. Keete Inlet, and Keete Island are the only charted names.

14. Special Reports & Supplemental Data

To be forwarded at later date:

Hydrographic Survey Sheet H0-1054
Hydrographic Descriptive Report for same.
Tide Data
Sounding Records and fathograms.

Forwarded with this report:

Office Photos
Field Photos
Advance Prints, Shoreline MSS T-11294, T-11295, T-11035
Blueline MSS of same number.

15. Notes to Compiler on Advance Shoreline MSS T-11294, T-11295, T-11035

The mean HWL shown on the MSS is believed to be slightly too far inshore. It is distinguished on the photos by the black band mentioned in Section 7 above.

The rock north of triangulation station END should be, if possible, shown on the final MS.

The reef on which signal PRY is located should be redrawn using sketched outline on the field photo as a guide.

Respectfully submitted,

John J. Dermody
Ens., USC&GS

Approved:

John Bowie, CDR, USC&GS
Comdg., Ship HODGSON

KEWEN INLET AND APPROACHES (FROM TRIANG. STA. HAB TO SIGNAL ILE)

HYDRO SIGNAL	MANU-SCRIPT	PHOTO NO.	METHOD OF LOCATION
Ark	T-11035	41055	Angle and dist. from off. p.p.
Col	T-11035	41053	Angle and dist. from field p.p.
Con	T-11295	41045	Angle and dist. from off. p.p.
Eye	T-11295	41045	Off. p.p.
Gar	T-11035	41053	Angle and dist. from field p.p.
Gut	T-11294	41004	Angle and dist. from off. p.p.
Ham	T-11294	41045	Angle and dist. from off. p.p.
Hl	T-11035	41053	Angle and dist. from off. p.p.
Hid	T-11294	41045	Off. p.p.
Ile	T-11294	41045	Angle and dist. from off. p.p.
Imp	T-11295	41045	Angle and dist. from off. p.p.
Log	T-11035	41053	Angle and dist. from field p.p.
Mas	T-11294	41045	Angle and dist. from off. p.p.
Mo	T-11294	41045	Angle and dist. from off. p.p.
Pol	T-11294	41004	Off. p.p.
Pot	T-11294	41045	Angle and dist. from off. p.p.
Pry	T-11035	41053	Radial plot
Rok	T-11294	41045	Angle and dist. from off. p.p.
Rip	T-11035	41053	Angle and dist. from off. p.p.
Rit	T-11295	41053	Off. p.p.
Rod	T-11294	41045	Angle and dist. from field p.p.
Sis	T-11294	41004	Angle and dist. from off. p.p.
Sop	T-11294	41004	Angle and dist. from off. p.p.
Sus	T-11295	41045	Off. p.p.
Tab	T-11035	41053	Angle and dist. from off. p.p.
Toe	T-11294	41004	Angle and dist. from off. p.p.
Ump	T-11035	41053	Angle and dist. from field p.p.
Val	T-11295	41045	Angle and dist. from off. p.p.
Ver	T-11294	41045	Angle and dist. from off. p.p.

2. AREAL FIELD INSPECTION:

The area inspected for boat sheet PA-1155 (covered by manuscripts T-11295 and T-11035) is in the upper half of Klakas Inlet on the east side of Cordova Bay (USC&GS Chart No. 8147). The shoreline inspection was started from the northern limits of the 1954 work to the north end of Klakas Inlet.

The area inspected for boat sheet PA- 1255 (covered by manuscripts T-9903, T- 9435, T- 11501, and T- 11502) is in Hetta Inlet and the southern end of Sukkwan Strait. The field inspection started from the northern limits of the 1954 work and continued north to a line running easterly from Bek Point, and into Sukkwan Strait to a north-south line at longitude 132 degrees, 44 minutes.

The area inspected for boat sheet PA-1355 (covered by manuscripts T-11498, T-11499, and T- 11502) is in Hetta Inlet and extends northerly from junction with boat sheet PA-1255 to latitude 55 degrees, 14 minutes.

The area inspected for boat sheet PA-1455 (covered by manuscripts T-11494, T- 11495, and T-11499) is in Hetta Inlet north of junction with boat sheet PA-1355 to the head of Portage Bay.

The field inspection was accomplished at various times throughout the current season, during the periods when hydrographic signals were built and located in advance of the hydrographic surveys.. The entire shoreline was inspected from the water, close inshore.

Field inspection consisted of (1) recovery and identification on areal photographs of existing triangulation stations, and identification of newly established triangulation stations; (2) identification of hydrographic control signals; (3) shoreline and offshore rock inspection.

The photographic coverage consists of single lens photographs at a scale of 1:10,000 and nine lens photographs at a scale of 1:10,000 and 1:20,000. The single lens photographs were used throughout with the exception of the identification of two hydro signals, PIE and YET, which could only be identified on one nine lens 1:10,000 photograph numbered 41002 (manuscript T-9903).

The photography was generally good, but due to shadows and overhanging trees along the shoreline, some difficulty was experienced in interpreting features.

3. HORIZONTAL CONTROL:

(a) Horizontal control established by second order triangulation:

TALON 1955, HETTA 1955, PARKA 1955, ANTON 1955, and SIMON 1955.

Horizontal control established with third order accuracy, for location of hydrographic signals (manuscripts T-9903, T-11499, and T-11502):

Ida	Sign*	Yam	Fig
Amo	Bat*	Ado*	Dog*
Eva*	Era*	Hex	Lax*
Pod*	Ice	Gas*	Mar

Horizontal control established by theodolite and sextant cuts from triangulation stations and whose positions were computed, for location of hydrographic signals and the adjustment of radial plot of manuscripts (manuscripts T-9903 and T-11294):

Bib, Oat 1954, Ply, and Abe.

All of the above hydrographic signals, except those marked with an asterisk, have been field inspected and also located on the photographs. Their photo locations were used on the boat sheets. It is recommended that the triangulation positions of the above hydro signals be used on the smooth hydrographic sheet.

(b) All horizontal control is on the N.A. 1927 datum and no datum adjustments are necessary.

(c) All control used in 1955 was established by the Coast and Geodetic Survey.

(d) An attempt was made to recover and identify on photographs all previously established triangulation stations, together with identifying on photographs all newly established triangulation stations within the area field inspected.

(e) The following triangulation stations were searched for but could not be found, and are presumably lost:

HIGH 1908-14, REEF 1908-14, NEAR 1908-14

(f) The following twelve stations were identified for photo control and entered on Control Identification Cards:

Triangulation Station	Map No.	Photo No.
COPPER 2, 1908	T-11502	54-0-184
POINT 1908	T-11502	54-0-76
BRETT 1908-14	T-11501	54-0-76
EASY 2, 1908	T-9435	54-0-75
FOG 1908,1954	T-9435	54-0-73
LIME 2, 1954	T-11294	54-0-181
GRASS 1905,1954	T-11293	54-0-72
LOG 1908-14	T-11501	54-0-60
CLOSE 1908-14	T-11501	54-0-60
TALON 1955	T-11502	54-0-76
HETTA 1955	T-11502	54-0-186
SIMON 1955	T-11499	54-0-78

4. VERTICAL CONTROL:

No vertical control was established.

5. CONTOURS AND DRAINAGE:

Not investigated.

6. WOODLAND COVER:

The area is heavily covered with spruce, hemlock, and some cedar. The only deciduous trees are small birches and alders growing sparcely in small areas which have been cut over for mining installations and are now in ruins. Along the major portion of the shoreline, the heavy growth of trees extends to the high water line, and in many cases overhang into the water. This condition made it impossible in several instances to identify triangulation stations on the photographs.

7. SHORELINE AND ALONGSHORE FEATURES:

(a) The mean high water line was adequately compiled on the manuscripts. A few exceptions were noted on the field photos.

(b) The low water line, where it existed, was delineated on the boat sheet. In general, it agreed with the offshore dotted line shown on the manuscripts.

(c) The foreshore was usually steep. The delineation as shown on the manuscripts is adequate.

(d) There were no prominent bluffs and cliffs of importance within the area inspected.

(e) There are no shoreline structures within the area inspected. The one dock in Copper Harbor is now in ruins and does not show on the photographs outside of the high water line.

8. OFFSHORE FEATURES:

Islands, rocks, reefs, ledges, and foul areas, offshore from the high water line, was well defined on the manuscripts. All offshore information was transferred from the manuscripts to the boat sheets and investigated during the hydrographic surveys. Information from these investigations was noted on the boat sheets.

9. LANDMARKS AND AIDS:

There were no landmarks or aids within the area field inspected.

10. BOUNDARIES, MONUMENTS, AND LINES:

Not investigated.

10-22-8

11. OTHER CONTROL:

Recoverable topographic stations were established in accordance with project instructions and are being submitted on Form 524. Two topographic stations were established in Klakas Inlet and two in Hetta Inlet.

The following photo-hydro stations were established:

Map T-9903

Station	Photo No.
Abe *1	54-0-182
Add	183
Bib 1	182
Big	183
Car	183
Cod	183
Don	183
Ear	183
Era *1	184
Fox	183
Gin	183
Oat 1954(Recovered) 1	182
Pie	41002
Ply *1	54-0-181
Roy	182
Sal *	182
Try *	182
Van *	182
War *	182
Yet *	41002

* Located also by sextant cuts.
1 Located also by triangulation.

Map T-9435

Station	Photo No.
Ace	54-0-74
Cut	42
Dip	74
Ego	42
Gal	42
How	42
Ivy	42
Jib	42
Key	75
Kim	42
Low	42
Mag	42
Max	74
Ned	73
Nut	42
Oak	72
Oil	42
Pal	42
Rat	42
Sip	42
Tan	42
Val	73
Vet	42
Wig	73
Yak	42
Zig	74

Map T-11035

Station	Photo No.
Ida	54-0-280
Nig	280
Out	279
Pet	279
Quo (Marked)	279
Rev	279
Sis	279
Tan	279
Use	279

Map T-11293

Station	Photo No.
Lag	54-0-72
Pot 1954(Recovered)	72
Quo	72
Rag	72
Sam	72
Toy	72

Map T-11495

Station	Photo No.
Alp	54-0-216
Art	216
Amp	216
Bum	216
Bus	216
But	216
Cab	215
Cat	216
Cop	216
Dog	216
Dot	215
Duo	216
Eat	228
Ego	216
Emo	216
Era	216
Fez	216
Fin	228
Fry	216
Gad	217
Gin	216
Gum	216
Hoe	216
Hop	217
Hut	216
Ice	216
Irk	216
Ivy	217
Jar	217
Job	215
Jut	216
Ked	217
Kin	215
Lad	214
Leo	217
Lug	217
Low	216
Mag	215
Man	217
Mop	217
Mug	216
Ned	215
Nip	216
Now (Marked)	217
Nut	217
Oak	216
Odd	215
Ohm	217
Oil	217
Pet	216

Map T-11495 (Cont.)

Station	Photo No.
Pin	54-0-217
Pup	215
Rag	217
Rat	216
Rig	215
Rio	217
Sal	215
Sol	228
Sop	216
Tax	215
Tub	216
Val	217
Vet	215
Wag	215
War	217
Was	216
Yam	216
Yes	216
Zoo	216

Map T-11295

Station	Photo No.
Add	54-0-282
Art	282
Bag	282
Bob	282
Cab	282
Cob1954 (Rec.)	282
Cry	282
Day	282
Dig1954 (Rec.)	282
Dip	282
Ear	282
Egg	281
Fix	282
Gal (Marked)	281
Her	281
Jay	280
Kim	280
Leo	280
Mop	280
Sam 1954 (Rec.-Marked)	282
Val	282
Wag	282
Yes	282
Zoo	282

Map T-11502

Station	Photo No.
Alp	54-0-76
Bob	76
Cow	76
Day	76
Eat	76
Fig *	77
Fly	76
Gag	76
Hat	76
Hex *	76
Irk	76
Ice *	76
Job	76
Ked	76
Key	187
Lay	76
Lug	187
Mal	76
Moe	186
Nat	76
Nip	186
Oak	186
Old	76
Pad	186
Rev	186
Sol	186
Tub	186
Use	186
Wed	186
Wag *	76
Yam *	76
Zoo	76

* Located also by triangulation.

Map T-11498

Station	Photo No.
Ado	54-0-227
Bob	227
Cow	227
End	78
Fat	79
Gas	228
Hex	228
Ida	227
Joy	227
Set	227
Tom	228
Use	227
Van	227
Who	227
Yak	227
Zig	227

Map T-11499

Station	Photo No.
Ace	54-0-228
Ask	78
Arm	78
Bag	78
Bib	228
Box	78
Cab	78
Cod	228
Cut	78
Day	228
Dip (Marked)	228
Don	79
Dot	78
Ebb	78
Eve	228
Fog	79
Fun	78
Gus	78
How	78
Jug	78
Mar *	78
Yum	78
Zoa	78

* Located also by triangulation.

Map T-11501

Station	Photo No.
Hod	54-0-76
Jap	76
Ken	60
Mid	59
Nod	60
Ora	60
Rio	61

Map T-11494

Station	Photo No.
Key	54-0-228
Peg	217
Toy	228

12. OTHER INTERIOR FEATURES:

There are no buildings, docks, bridges, cables, roads or airports in this area.

13. GEOGRAPHIC NAMES:

The area field inspected is all inclusive on Chart No. 8147.

On 22 July 1955, Mr. James Edenso, whose address is Hydaburg, Alaska, was interviewed by CDR. J. C. Partington. Mr. Edenso was then employed as a watchman at Eek Inlet for the U. S. Fish and Wildlife Service. Mr. Edenso, a member of the Indian race, was born at Howkan village in Kaigani Strait, and is about 60 years old. He has fished most of his life in and around Cordova Bay. He is an intelligent man with probably a grammar school or possibly a high school education. Mr. Edenso stated that the following geographic names are in local use:

Blanket Island - The island at the southeast entrance to Suk-Kwan Strait whose northeast point is charted as Round Point. No specific reason was given for this name.

Y Bay - The small bay on the west side of Hetta Inlet and just south of the above Blanket Island. The name Y Bay is used to denote this body of water because of a slide at the head of the bay shaped like the letter Y.

Mud Bay - On the east side of Hetta Inlet, about $2\frac{1}{2}$ miles north of Lime Point. The Coast Pilot mentions this name although the name is not charted. Local fishermen call this Mud Bay because of its usefulness as an anchorage.

The sites of Copper City, Coppermount, Corbin Mine, and Sulzer no longer exist. They are abondoned and in complete ruins. The aerial tramway and pipeline shown on the chart at Coppermount, together with the aerial tramway leading to Copper Mt., and the flume at Sulzer, are no longer in existance and should be removed from Chart No. 8147.

14. SPECIAL REPORTS AND SUPPLEMENTAL DATA:

Item	Transmitting Letter Date
Triangulation Data, Cordova Bay, Hetta Inlet, S.E.Alaska, Project 1357	12 August 1955

Reference is made to the following applicable data:

The 1955 Hydrographic Surveys. Boat sheets of the Ship PATTON were forwarded to the Washington Office and prints are available.

Copies of the transmittal letters showing the photogrammetric records transmitted with this report, are attached.

Respectfully submitted,

William C. Russell

William C. Russell,
CDR., USC&GS

Approved and forwarded:

J. C. Partington

J. C. Partington,
CDR., USC&GS,
Comdg., Ship PATTON

SUPPLEMENTARY
PHOTOGRAMMETRIC PLOT REPORT
Project Ph-117
Surveys T-11035 & T-11295

21. AREA COVERED

This radial plot report covers surveys T-11035, and T-11295. They are shoreline surveys in the area of Klakas Inlet of southeast 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 photograph centers are shown on a sketch attached to radial plot report of surveys Nos. T-9903, T-11035, T-11294, T-11295, T-11297 and T-11298 dated 19 February 1954.

Photographs:
Unmounted single lens photographs at a scale of 1:27,500 and ratioed to a scale of 1:10,000 were used in this radial plot.

Eight (8) photographs were used in the plot, numbered as follows: 54-0-278 thru 54-0-285.

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

Closure and Adjustment to Control:
Vinylite base sheets were prepared in this office. All pass points in the area around Max Cove of Klakas Inlet established in the nine-lens, 1:10,000 scale radial plot laid in February 1954, in surveys T-11298 were transferred to the base sheets from the manuscripts.

Pass points established in the 1:20,000 scale radial plot of the area were transferred to the 1:10,000 scale base sheets by means of transparent templets made for each point common to both the 1:20,000 and 1:10,000 scale photographs. Four rays were drawn radially from the point through the grid intersections on the 1:20,000 base sheets. The templets were oriented over the corresponding grid intersections on the 1:10,000 base sheets and the points pricked through to the base sheet.

For additional information about these supplementary pass points, see the Radial Plot Report for the 1:20,000 radial plot of the area.

The radial plot was started with photograph 54-0-285 holding to points established in the 1:10,000 plot laid in February 1954. The plot was extended northward through photograph 54-0-278. One supplementary control point was held at the southern end of the plot and one at

22. METHOD -- RADIAL PLOT (cont'd)

Closure and Adjustment to Control: (cont'd)

the northern end. Even though a tight plot was obtained it was impossible to hold all the other seven points established in the 1:20,000 plot. This can be attributed to the following 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, (4) the photographs were badly tilted and all except one had water centers.

Although only two of the supplementary control points established in the 1:20,000 scale radial plot were held, the placment of those two in the plot, and the fact that the other seven points were held within a mm. suggests that this radial plot, though not within the normal standard of accuracy, is not excessively in error.

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. The positions of pass points as established in this 1:10,000 scale plot were shown on the manuscript. The positions of pass points transferred from the 1:20,000 radial plot which could not be held were established in this radial plot.

23. ADEQUACY OF CONTROL

There are no control stations in the area of this radial plot.

24. SUPPLEMENTAL DATA

Pass points established in a 1:20,000 scale radial plot were used as control for this radial plot. Reference should be made to the 1:20,000 scale radial plot report for Projects Ph-117 and Ph-148.

25. PHOTOGRAPHY

With only one flight of photographs used in this radial plot, it is difficult to say how much adverse effect the photographs had on the plot. It is believed, however, that much of the difficulty encountered was due to the photographs. Definite evidence of tilt was observed on photographs No. 54-0-282 and 54-0-283. In addition, all of the photographs had water centers.

Respectfully submitted
25 February 1955

E. L. Williams

E. L. Williams
Carto. Photo. Aid

Approved and forwarded

E. H. Kirsch, Comdr. USC&GS
Officer in Charge
Baltimore Photo. Office

PHOTOGRAMMETRIC PLOT REPORT
PROJECT NO. Ph-117
Surveys Nos. T-9435, T-9903, T-11035 & T-11293 thru T-11298

21. AREA COVERED

This radial plot report covers the entire area of Surveys Nos. T-9435, T-9903, T-11293, T-11294, T-11295, T-11297 and T-11298, that portion of Survey No. T-11296 that lies north of Tlevak Strait, the southwestern corner of T-11035. These are all shoreline surveys located along Cordova Bay, the north side of Tlevak Strait, Hetta Inlet and Nutkwa Inlet and extends northward from Kassa Inlet to the entrance to Sukkawn Inlet. That part of Klakas Inlet covered by photography was also included.

22. METHOD - RADIAL PLOT

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

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

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

Photographs:
Unmounted photographs taken 8 July 1953, with the U.S.C. & G. S. nine-lens camera, focal length 8¼ inches, at a scale of 1:10,000 and unmounted single lens photographs taken during 1948 at a scale of 1:40,000 and ratioed to a scale of 1:10,000 were used in this plot.

Thirty-seven nine-lens and fifteen single lens photographs were used in this plot. They are numbered as follows:

Nine-lens photographs
40954 thru 40958
40977 thru 40979
40998 thru 41007
41009
41038 thru 41040
41042 thru 41051
41053
41055 and 41056
41058 thru 41062

Single lens photographs
SEA 26-018 thru SEA 26-022
SEA 117-108 thru SEA 117-111
SEA 117-139 thru SEA 117-144

Standard symbols were used on the photographs.

22. METHOD - RADIAL PLOT (cont'd)

Templets:

Vinylite templets were made for all photographs. The master templet was used to make adjustments for film and paper distortion and chamber displacements on the nine-lens photographs. No adjustments for film or paper distortion could be made on the templets for the single lens photographs because there were no fiducial marks.

Closure and Adjustment of Control:

Vinylite base sheets were prepared in this office. Since junctions of grid lines between several of the manuscripts could not be made, the base sheets were prepared by transferring several projection intersections, including all manuscript corners, along the neat limits of the manuscripts to the base sheet. The projection intersections for Surveys T-11299, T-11300 and T-11301 as established by the first radial plot for this project were used as a base to continue northward to the limits of the project.

All control was transferred to the base sheets at the same time that the projection intersections were being transferred.

All pass points and photograph centers established, on Surveys Nos. T-11299, 11300 and 11301, by the first plot were transferred to the base sheets for this plot.

The radial plot, actually a continuation of the first plot, was then constructed on the base sheets.

The templets for those photographs which are within the limits of surveys Nos. T-11299, T-11300 and T-11301 were relaid. Templets for 40998 to 41001 were laid next and it was found that control station NEW R.M. 1, 1908 could not be held with the other control. Templets for 41003 to 41009 were laid and control stations NEW R.M. 1, 1908 and NUT, 1918 could not be held. Templets for photographs 41044 to 41048 were then laid and again control station NUT, 1918 could not be held, however, a tie-in was made with station CEDAR 2, 1908. Templets for 41049 to 41056 were laid. Control station GULL, 1918 which had been identified in this office could not be held, however, a tie-in was made with station COPPER 2, 1908. All other templets for photographs on the east side of Cordova Bay were then adjusted in place. That part of the plot east of Cordova Bay was then complete except for the flight of single lens photographs numbered 26-018 to 26-022 which were then laid with the result that control stations FOG, 1908 and FLAT 2, 1908 could not be held.

Templets for photographs 40977 to 40979 and 40954 to 40956 were used. All control was held on these templets except SHOE, 1907-25. Then the templets for the remaining nine-lens and single lens photographs were laid and readjusted several times until the best possible result was obtained.

22. METHOD - RADIAL PLOT (cont'd)

Transfer of Points:
The positions of all photograph centers and pass points were transferred to the manuscripts by superimposing the manuscripts on the templets and matching common projection intersections and control points.

23. ADEQUACY OF CONTROL

The positions of photograph centers and pass points in Survey T-11193 may be weak due to extension of the plot beyond control and due to the poor quality of single lens photography.

In surveys T-11295 and T-11298, the two easternmost flights had no control, requiring a long bridge between the control stations at Hunter Bay (southern edge of T-11300) and control in Keete Inlet (northwest corner of T-11295). Positions of pass points in Klakas Inlet and at the head of Kassa Inlet may be quite weak due to this long bridge of 10 nine-lens photographs between control stations.

As previously stated several control stations could not be held in the radial plot.

Sub Pt. SHOE, 1907 - 25: Radially plotted position of the sub point falls 0.9 mm southeast of its computed position. Believed to be incorrectly identified by the field party. There is another "white spot" approximately 0.9 mm northeast of the "white spot" identified as the Sub Pt.

Sub Pt. NEW R.M. 1, 1908 - The radially plotted position of the Sub Pt. falls 1.5 mm north of its computed position. This may be due to either an error in computation of the position of the Sub Pt. or in the identification. First it was necessary to compute the position of NEW R.M. 1. The only information available was a bearing and distance from R.M. 1 to NEW, 1908. This bearing was assumed to be the magnetic bearing at the time the station was established.

Sub Pt. NUT, 1918 - The radially plotted position of the Sub. Pt. falls 2.4 mm WSW of its computed position. This may be due to incorrect identification as there is another point of ledge approximately in correct location that is visible on the photographs.

GULL, 1918 - The radially plotted position of this station falls 0.6 mm southeast of its geographic position. Probably due to misidentification in the compilation office. This station was not identified in the field.

FLAT 2, 1908 - No definite intersection obtained due to inability to identify accurately on the single lens photographs. A shadow point was identified on a photograph taken during 1953.

FOG, 1908 - The same conditions apply for this station as for FLAT 2, 1908.

24. SUPPLEMENTAL DATA

No graphic control surveys were used in this plot.

25. PHOTOGRAPHY

All nine-lens photographs have large light struck areas on the western side. Many have deep shadows, trees and relief displacement obscuring the shore line.

All of the single lens photographs have very poor definition and were taken five years prior to the nine-lens photographs making it almost impossible to find the points, that are common to both types of photographs.

No tilt determinations were made.

The definition is good on the nine-lens photographs except in the deep shadow and light struck areas.

The definition is very poor on the single lens photographs.

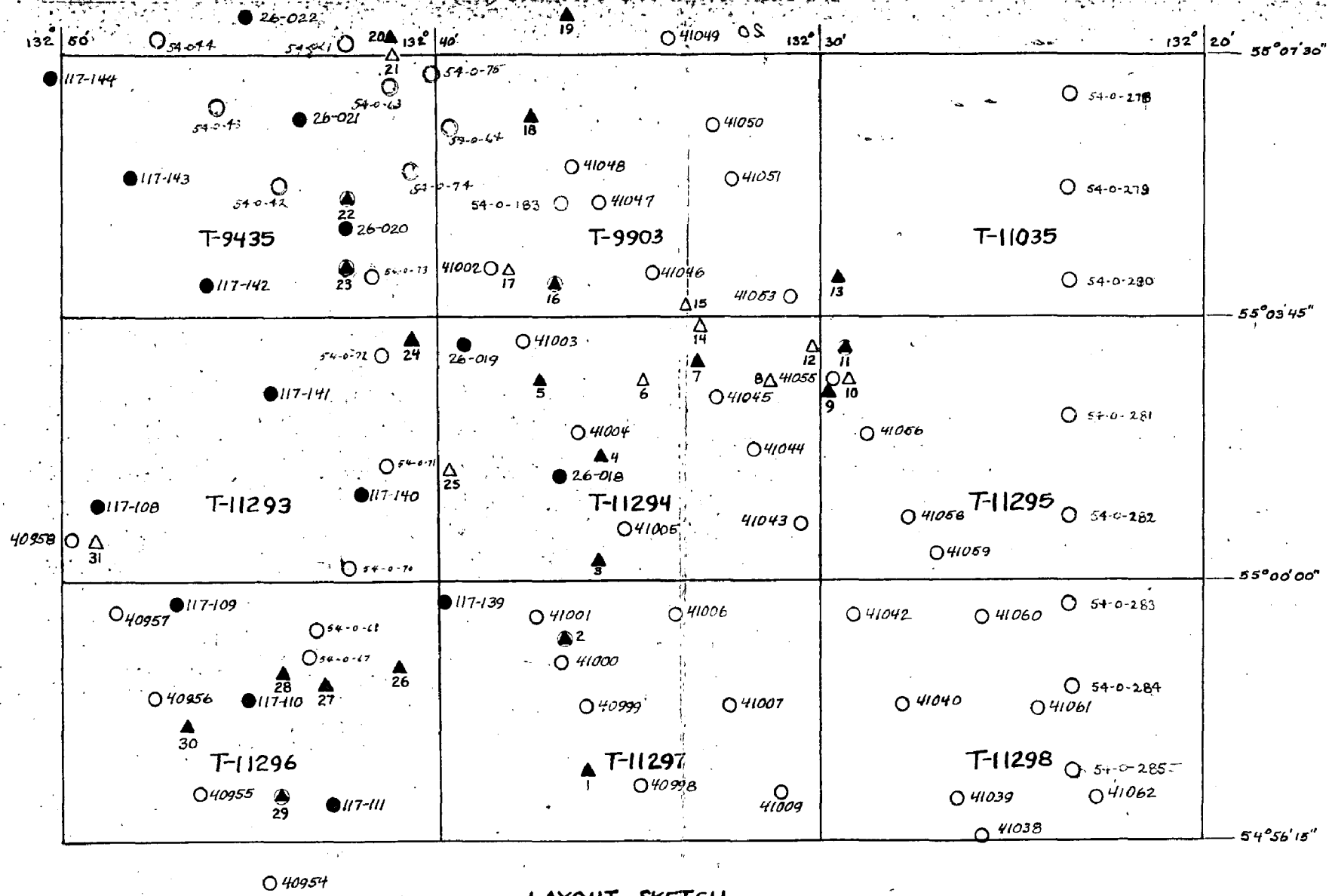
Respectfully Submitted
19 February 1954

Harry R. Rudolph

Harry R. Rudolph
Carto. Aid (Photo)

LIST OF CONTROL

No.	Name of Station	Identification
1	CLUMP, 1907-25	Sub Pt.
2	NEW R.M. 1, 1908	Sub Pt.
3	MAB, 1918	Sub Pt.
4	HAS, 1918	Sub Pt.
5	ATA, 1918	Sub Pt.
6	LIT, 1918	None
7	KEET, 1918	Direct
8	END, 1918	None
9	MED, 1918	Sub Pt.
10	COS, 1918	None
11	GULL, 1918	Ident. in Office
12	TREE, 1918	None
13	UP, 1918	Direct
14	IN, 1918	None
15	BOY, 1918	None
16	NUT, 1918	Sub Pt.
17	FLAG, 1908	None
18	CEDAR 2, 1908	Sub Pt.
19	COPPER 2, 1908	Sub Pt.
20	ROUND, 1908-14	Sub Pt.
21	EASY 2, 1908	None
22	FLAT 2, 1908	Sub Pt.
23	FOG, 1908	Sub Pt.
24	GRASS, 1905-18	Sub Pt.
25	FOOD, 1918	None
25	MELLON ROCK, 1908	None
26	GREEN R.M. 1907-18	Sub Pt.
27	JACK, 1907	Sub Pt.
28	HEN, 1907	Sub Pt.
29	SHOE, 1907-25	Sub Pt.
30	NICE, 1907	Sub Pt.
31	LUCK, 1907	None



LAYOUT SKETCH
PH-117
SURVEYS NOS T-9435, T-9903, T-11035 and T-11293 to T-11298 inclusive

- ○ NINE LENS PHOTOGRAPHS
- ● SINGLE LENS PHOTOGRAPHS
- ▲ CONTROL STATIONS (identified)
- ◭ CONTROL STATIONS (not held in plot)
- △ CONTROL STATIONS (not identified)
- ○ 1954 SINGLE LENS RATIOED PHOTOGRAPHS

FORM 164
(4-23-54)

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT
CONTROL RECORD

MAP T- 11035 PROJECT NO. 6117 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)
UP, 1918	G-463 p. 466	N.A. 1927	55 04 11.325				350.2	(1505.2)		
			132 29 29.386				521.5	(543.3)		

1 FT. = .3048006 METER

COMPUTED BY: F. J. Tarcza DATE 18 December 1953 CHECKED BY: A. Queen DATE 22 December 1953

COMM-DC-57843

COMPILATION REPORT
T-11035
Project 6117

Field Inspection Report:

1. Photogrammetric Field Inspection Report, S. E. Alaska, Cordova Bay - Prince of Wales Island, 1953, C&GS Ship HODGSON, Franklin R. Gossett, Commanding.

2. Photogrammetric Field Inspection Report, Ph-117, Surveys T-11294, T-11295, T-11035, 1954, C&GS Ship HODGSON, J. Bowie, Commanding.

3. Photogrammetric Field Inspection Report, Project 6117, Hetta Inlet and Sukkwan Strait, 1955, C&GS Ship PATTON, J. C. Partington, Commanding. ~~(See Descriptive Report for Survey T-9903).~~

Photogrammetric Plot Report:

In addition to the attached report, refer to Photogrammetric Plot Report for Surveys T-9903, T-11035, T-11294, T-11295, T-11297 and T-11298, dated 19 February 1954, ~~which is part of the Descriptive Report for Survey T-9903.~~

31. DELINEATION

This manuscript was delineated by graphic methods.

The west shoreline of Keete Inlet was delineated from photograph 45386, scale 1:20,000, by use of the Vertical projector.

32. CONTROL

Refer to the Photogrammetric Plot Reports.

33. SUPPLEMENTAL DATA

Copies of the boat sheets for the following surveys were available for comparison purposes:

H-8132 (1954) (Keete Inlet)
PA-1155 (Klakas Inlet)

34. CONTOURS AND DRAINAGE

Contours: Inapplicable.

Drainage: No comment.

35. SHORELINE AND ALONGSHORE DETAILS

There was no field inspection in the area at the time the delineation of the shoreline was done. Upon receipt of field inspection, the boat sheets and the descriptions of the photo-hydro signals, appropriate corrections were applied, particularly at places where photo-hydro signals were located.

Shadows obscured some parts of the shoreline and where no positive image was visible on any photograph, the shoreline was shown with a broken line.

The low water line was office interpreted from the photographs which were at a low stage of tide.

36. OFFSHORE DETAILS

Rock elevations were shown only when the information was made part of the photogrammetric data. No rock data was taken from the boat sheets except to correct the symbolization.

37. LANDMARKS AND AIDS

None.

38. CONTROL FOR FUTURE SURVEYS

Form 524 has been submitted for station QUO, 1955.

Seventeen photo-hydro signals have been located in the area of this survey. See par. 49.

39. JUNCTIONS

Junction has been made with survey T-11295 to the south. There is no junction to be made with surveys T-9903 to the west, T-11516 (Project 6148) to the north and T-11519 (Project 6148) to the east.

40. HORIZONTAL AND VERTICAL ACCURACY

See Photogrammetric Plot Report.

41 - 45. Inapplicable.

46. COMPARISON WITH EXISTING MAPS

The information shown on the USGS Craig Quadrangle, scale 1:250,000, edition of 1952, is based on C&GS Charts.

47. COMPARISON WITH NAUTICAL CHARTS

Chart No. 8147, scale 1:40,000, published August 1931, corrected to 5/12/52.

Items to be applied to nautical charts immediately: None.

Items to be carried forward: None.

Respectfully submitted
15 February 1956

Ruth M. Whitson

Ruth M. Whitson
Carto. Photo. Aid

Approved and Forwarded

E. H. Kirsch

E. H. Kirsch, Comdr. C&GS
Baltimore District Officer

August 6, 1970

GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-117 (Alaska)

T-11035

Keete Inlet

Klakas Inlet

Prince of Wales Island

Approved by:

A. J. Wraight

A. Joseph Wraight
Chief Geographer

Prepared by:

Frank W. Pickett

Frank W. Pickett
Cartographic Technician

T-11035

49. NOTES FOR HYDROGRAPHER

Recoverable topographic station QUO, 1955 has been located on this manuscript. The following are the photo-hydro signals located on this manuscript:

Keete Inlet, Survey H-8132(1954)

ARK	HI	RIP*
COL	LOG	TAB
GAR	PRY	UMP

*RIP - Position on the blackline impression does not agree with the angle and distance recorded on field photo 41053.

Klakas Inlet, Survey PA-1155

IDA
NIG
OUT
PET
REV - 14.2 mm S of boat sheet position. May have been relocated by the hydrographic party.
SIS - 1.0 mm N of boat sheet position.
TAN
USE - 0.6 mm NW of boat sheet position.

2-10-36 -40-

Form T-2

50-

PHOTOGRAMMETRIC OFFICE REVIEW

T- 11035

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

CONTROL STATIONS

4a. Classification label ✓

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 alongshore 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. Blaun
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.

Compiler

Supervisor

43. Remarks:

M-2661-12

Review Report T-11035
Shoreline Mapping

August 1970

61. General Statement

Field inspection photograph 54-0-229 (hydro signals only) was used during final review.

62. Comparison with Registered Topographic Surveys

Comparison was made with topographic surveys 2331, dated 1897, 1:80,000 scale, and 3717, dated 1918, 1:10,000 scale. These surveys are superseded for charting by T-11035.

63. Comparison with Maps of Other Agencies

Comparison was made with USGS Craig (A-2), Alaska, quadrangle, dated 1951, 1:63,360 scale. No differences of importance were found in the comparison.

64. Comparison with Contemporary Hydrographic Surveys

Survey T-11035 was used as a base for new hydrography. Hydrographic surveys 8132, dated 1954 and 8229, dated 1955, 1:10,000 scale were used for comparison. The agreement is good.

65. Comparison with Nautical Charts

Comparison was made with Chart 8147, 1:40,000 scale, 5th Edition, corrected to July 3, 1967. 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,

Charles Thomas
Chief, Photogrammetric Branch

Jack E. Guth
Chief, Photogrammetry Division