Form 504

U. S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

	Shoreline (Photogrammetric) Office No. T-11494
	LOCALITY
State	ALASKA
General locality	· · · · · · · · · · · · · · · · · · ·
Locality	
198	54-19 <u>5</u> 6
J. C. Partington	HIEF OF PARTY
LIBRA	ARY & ARCHIVES
DATE	

сомм- рс 61300

DESCRIPTIVE REPORT - DATA RECORD

T-11494

Project No. (II): Ph-117

Quadrangle Name (IV): J

Field Office (II): USC&GS Ship PATTON

Chief of Party J. C. Partington - J.T. Jarman

Photogrammetric Office (III): Baltimore, Md.

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

Instructions dated (II) (III):

Field: 3/17/53

Office:

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):

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): MINK, 1956

Lat.: 55° 15' 11.970" (370.2m) Long.: 132° 49' 49.341" (871.6m)

Adjusted CENTRAL PROPERTY.

Plane Coordinates (IV):

UTM State:

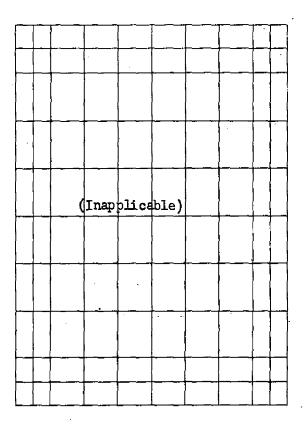
8 Zone:

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, .



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

DESCRIPTIVE REPORT - DATA RECORD

Field Inspection by (II): W. C. Russell - F. J. Tucker, Jr.

T. E. Simkin - G. E. Haraden - D. E. Westbrook 1956 " "

Planetable contouring by (II):

Date:

Completion Surveys by (II):

Date:

Mean High Water Location (III) (State date and method of location): 1954, date of photography Office interpretation, Supplemented by field inspection.

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): E. L. Williams

Date: April 1957

Control checked by (III): L. A. Senasack

Date: April 1957

Radial Plot spontereoscopic

Controlecterator by (III): E. L. Williams

Date: (3/18/55)

(3/0/55)

Planimetry

Contours

Stereoscopic Instrument compilation (III):

Date:

Date:

Manuscript delineated by (III): R. Whitson - F. Wisiecki

Date: 6/10/57

Photogrammetric Office Review by (III): R. Glaser

Date: 6/14/57

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

Date:

•

COMM- DC- 57842

U.S. DEPARTMENT OF COMMERCE

Camera (kind or source) (III): USC&GS Nine-lens & single lens "O" cameras

		PHOTOGRAPHS (III)	1			
Number	Date	Time	Scale	Stage	of Tide	
54-0-217, 218	6/4/54	1620	1:10,000	11.21	above	MLUN
54-0-224,225	Ħ	1637	11	12.21	11	19
54-0-227, 228	n	1643	ti	11.31	tt	tt
45414, 45415	11	1128	1:20,000	0.81	below	- 11

Tide (III)

From predicted Tide Tables

Ratio of Mean | STATES Ranges Range Range Sitka, Alaska 9.9 South Pass, Sukkwan Strait Copper Harbor, Hetta Inlet

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

Date: JUNE 1970

Diurnal

Final Drafting by (IV):

Reference Station:

Subordinate Station:

Subordinate Station:

Drafting verified for reproduction by (IV):

Proof Edit by (IV):

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

Shoreline (More than 200 meters to opposite shore) (III): 4.7 Shoreline (Less than 200 meters to opposite shore) (III): 0.9

Control Leveling - Miles (II):

Number of Triangulation Stations searched for (II): #None

Number of BMs searched for (II):

Recovered:

Identified: Identified:

Date:

Date:

Date:

Recovered:

Number of Recoverable Photo Stations established (III):

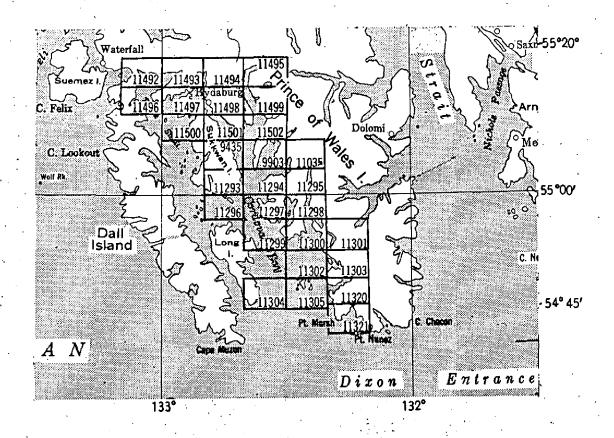
Number of Temporary Photo Hydro Stations established (III): 3

Remarks:

*One station established and identified in 1956.

COMM- DC- 57842

SHORELINE MAPPING PROJECT PH - 117 Cordova Bay & Vicinity of S.E. Alaska



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	SHEET NO	MI	les sh	ORELINE	11.321	· · · · · ·	20	20	
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	11303	1.4	4	14		TOTALIO			

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 shore-line 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

FOR MAPS

T-11493-497-498, T-11500-501

#

2. AREAL FIELD INSPECTION:

This report covers the shoreline of the northern part of Suk-kwan Strait and all of South Pass and the adjacent area to the north.

The shoreline is generally rocky with trees overhanging the high water line almost everywhere. North of Saltery Point there are numerous small islands, shoals, and flats which bare at various stages of the tide.

The only cultural features are in the village of Hydaburg. There are several native cemeteries on the small islands immediately north of Sukkwan Narrows.

Photo coverage is adequate for the entire area. The photographs are somewhat "fuzzy" causing most of the boulder detail to appear as smooth, sand beaches. Shadow in some cases obscures the high water line. The approximate shoreline on the preliminary manuscripts was checked on the ground, and except as noted, is adequate for charting purposes.

3. HORIZONTAL CONTROL:

(a) The following supplemental stations were established in 1956 to control the photographs in the area northeast of North Pass.

Second Order		•	Third Order (Intersection)
CLAM .		^	CALF
MINK			~ LION
TOAD		4	
SEAL LOON	C ₄		* .

All of the above stations, with the exception of Station LOON, were identified on the photographs.

In addition to the above triangulation stations, the following hydrographic signals, located by graphic control, were identified on the photographs and can be used for control if desired.

1					مسا	u		
ASK	GAB	LEO	SOW	FAT	IVY	LOG	TEE	FUN
	NOR							

HDRIZONTAL CONTROL (Contin.):

- (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 identified as far as the field work was carried.

A new second order triangulation scheme was carried from Hyda- burg to North Pass. An attempt was made to identify all these stations, but lack of ground detail made some stations impossible to identify.

It is considered that a sufficient number of stations was identified to control the radial plot adequately.

(e) A thorough search was made for all stations in the project area.

4. VERTICAL CONTROL:

Inapplicable.

5. CONTOURS AND DRAINAGE:

Inapplicable.

6. WOODLAND COVER:

The entire area is covered with a dense growth of coniferous trees extending down to and overhanging the high water line im most places.

7. SHORELINE AND ALONGSHORE FEATURES:

- (a) Shoreline inspection was completed in the area north of latitude 55° 09' and east of longitude 132° 55'. All shoreline was inspected from a launch or skiff running close inshore. The highwater line is indicated on various places on the photographs. Some areas are in shadow and the highwater line is not visible on the photographs. Some of these areas are not defined in detail on the photographs, however, by comparison with the preliminary manuscript, few errors in the interpretation were found and for charting purposes, the high-water line is entirely adequate as shown.
- (b) The low-water line is sketched on the photographs at various places. In areas where extensive flats exist, the low-water line is defined by the hydrography.

7. SHORELINE AND ALON GSHORE FEATURES (CONTIN.):

- (c) The foreshore is characterized by boulders extending from a few feet to several hundred feet in bights. In some cases grassy islets and spits which cover only in extreme storms were misinterpreted as sand bars which cover at MHW. These have been clarified on the photographs. It is noted that almost the entire shoreline is labeled as sand and gravel on the preliminary manuscripts. It should be mentioned here that there are very few sand beaches in the project area. Most all of the foreshore is boulders, except as noted. The different types of foreshore are indicated on the photographs.
- (d) There are no high bluffs or cliffs along the shoreline. Bedrock is exposed up to the storm waterline above which there is top soil and vegetation.
- (e) The only waterfront structures are at Hydaburg and are evident on the pictures. Ellis Airlines maintains a small float on the north side of the cannery pier. There is a small pier in the basin at the northern edge of the village and a float secured to a dolphin just off shore from this pier. The objects on the highwater line at the head of this basin are floats which are used alongside the cannery pier during the fishing season and stored on the beach at other times.
 - (f) There are no submarine cables in the area.

8. OFFSHORE FEATURES:

There are some piles off the cannery at Hydaburg which are indicated on the photographs. The only other offshore features are rocks and shoals. All rocks visible at the time of inspection were noted on the photographs. Heights of rocks were estimated above the water surface at the time of inspection and the time and date is noted.

The area north of Hydaburg Harbor was not covered as thoroughly as should be because of lack of time. Some rocks were probably missed because it was impossible to complete all the inspection at low tide. A hydrographic survey would be required to locate all the rocks in this area.

Kelp areas are outlined approximately.

9. LANDMARKS AND AIDS:

Two new landmarks for nautical charts were located by planetable and were identified on the photographs. One of these, Hydaburg Presbyterian Church Spire, was later intersected with a theodolite. Of the five fixed aids to navigation in the area, three of them, Sukkwan Narrows Light, Goat Island Light, and Turn Rock Daybeacon, were used as sub-points for triangulation station identification. The Hydaburg Daybeacon is identified direct. The small uncharted and privately maintained daybeacon on the north side of the bar west of Hydaburg is not indicated on the photographs. It is located by planetable on topographic sheat PATT-56-B.

All floating aids were located by planetable and none are identified on the photographs.

10. BOUNDARIES, MONUMENTS, AND LINES:

Inapplicable.

11. OTHER CON TROL:

In addition to the hydrographic stations listed in Paragraph 3, the following recoverable topographic stations were located for hydrographic signals, but are not identified on the photographs: SKY, JIM, NAT, And PEP.

12. OTHER INTERIOR FEATURES:

There is a bridge over the creek at Hydaburg. There are no landing strips or other interior features.

13. GEOGRAPHIC NAMES:

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

14. SPECIAL REPORTS AND SUPPLEMENTAL DATA:

Data forwarded separately from this report are:

Field and Office Photographs
Control Station Identification Cards
Descriptions of Recoverable Topographic Stations
Complete triangulation data will be forwarded to the Washington
Office in the near future.

15. COMMENTS:

All hydrographic signals were located graphically by planetable on Sheets PATT-56-A, B, and C. Sheets A and C are at a scale of 1:10,000 and cover the northern part of Sukkwan Strait and South Pass respectively. Sheet B is atta scale of 1:5,000 and covers Hydaburg Harbor.

Short sections of shoreline were rodded in at various places and are so indicated on the topographic sheets. All rock detail visible at low water was either cut in or located by sextant fixes. Rocks are shown with their heights above mean lower low water.

On sheet C, all shoreline shown as dotted on the preliminary manuscripts was rodded in. The shoreline on both 10,000 scale sheets is in generally good agreement with the manuscripts.

Some discrepancies between the manuscript and topographic sheet B are apparent by inspection. The shoreline of the small islands north of Saltery Point is not in agreement with the manuscripts. The shoreline in this area was rodded in and is shown on the topographic sheet.

It as also apparent that the shoreline as per boat sheet PA-05156 should be shifted to the north slightly to agree with the graphic control. The shoreline for this boat sheet was blown up, using a Saltzman Projector, from 1:10,000 to 1:5,000. It is possible that some of the discrepancy was introduced inthe process of enlarging the manuscripts to 1:5,000 scale.

In compiling the final manuscripts, reference should be made to the graphic control sheets.

Because of the overhang of the trees and the lack of detail on the ground, it would have been difficult to locate, with certainty, sufficient signals to control the hydrography. The area surveyed was particularly well suited for graphic control in that there was ample triangulation on both sides of Sukkwan Strait and South Pass. For these reasons, photo-hydro control was not used and it is felt that control by planetable was justified.

16. LIST OF CONTROL STATIONS IDENTIFIED:

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

STATION	MANUSCRI PT	PHOTO NO.
ANT 1925	T-11500	540-47
ARK 1907,14	T-11500	540-38
BEACH 1925	T-11498	540-57
BLUFF 2 1908	T-11501	540-58
BOAR 1956	T-11497	540-55
CALF 1956	T-11493	540-223
CLAM 1956	T-11497	540-224
COLT 1956	T-11497	540-54
CRAB 1956	T-11497	540-56
CRIE 1956	T-11497	540-55
CROW 1956	T-11497	540-55
DEER 1956	T-11497	540 -55
DUCK 1956	T-11498	540 - 56
END 1925	T-11500	540-47
FIRST 1925	T-11498	540-56
FORT 1908,25	T-11500	540-38
FROG 1956	T-1149 7	540-55
GOAT 1956	T-11497	. 540 - 55
GOOD 1908,27	T-11501	540 - 58
HIGH 1908,14	T-11501	540-59
HIP 1907,27	T-11500	540-38
HOOK 1956	T-11498	540-56
HOP 1956	T-11497	540-56
HYDA 1925	T-11498	540-56
LAP 1908, 27	T-11500	540 -3 8
LION 1956	T-11493	540-223
MINK 1956	T-11494	540-224
OAR 1908, 27	т-11501	540-58

16. LIST OF CONTROL STATIONS IDENTIFIED (Contin.):

STATION	MANUSCRIPT	PHOTO NO.
POINT 1925	T-11498	540-57
PONY 1956	T-11497	540-223
ROW 1925	T-11497	540-56
SCRAGG 1925	T-11497	540-47
SEAL 1956	T-11497	540-55
SMAIL 1925	T-11498	540-57
SNAG 1956	T-11497	540-56
TERN 1956	T-11497	540-49
TOAD 1956	T-11497	540-224
WASH 1908,27	T-11501	540-58
WOLF 1956	T-11491	540-49

TOPOGRAPHIC STATIONS IDENTIFIED

Respectfully submitted,

Gerard E. Haraden

LT C&GS

Approved and Forwarded:

J. T. Jarman CDR USC&GS

Cmdg., Ship PATTON

Scaled Geographic Positions Topographic Control Identified

Name	Latitude & Longitude	Meters
FAT	55 11 132 48	431 1296
GAB	55 12 132 49	671 516
NOR	.55 12 132 49	244 444
SON	55 12 132 49	231 428
TER	55 12 132 49	889 565
TIN	55 12 132 49	548 47 9
LOG	55 11 132 52	412 1 0 19
ASK	55 11 132 5 3	1055 642
FUN .	55 10 132 52	1200 14
IVY	55 11 / . 132 54 .	274 69
LEG	55 10 132 47	1714 346
LEO	55 10 132 47	28 <u>4</u> 596

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 Eek Point, and into Sukkwan Strait to a north-south line at longitude 132 degrees, 44 minutes.

The area inspected for boat sheet FA-1355 (covered by mamuscripts 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 FA-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 fifficulty 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):

Ide	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	5 4-0-7 5
FOG 1908,1954	T-9435	54-0-73
LIME 2, 1 954	T-11294	54-0-181
GRASS 1905,1954	T-11293	54-0-72
I.OG 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 unsually 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. LANDWARKS AND AIDS:

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

10. BOUNDARIES, MONUMENTS, AND LINES:

Not investigated.

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

Map T-9435

Station	Photo No.	Station	Photo No.
Abe *1	54-0-182	Аоө	54-0-74
Add	183	Cut	42
Bib \	182	Dip	74
Big	183	Ego	42
Car	183	Gal	42
Cod	183	How	42
Don	183	Ivy	42
Ear	183	Jib	42
Era #1	184	Key	75
Fox	183	Kim	42
Gin	183	Low	42
Oat 1954(Red	covered) 182	Mag	42
Pie	41002	Max	74
Ply #1	54-0-181	Ned	73
Roy	182	Nut	42
Sal ≉	182	Oak	72
Try *	182	0il	42
Van #	182	Pal	42
War *	182	Rat .	42
Yet *	41002	Sip	42
		Tan	42
* Located a	lso by sextant	Val	73
cuts.	4	Vet	42
	lso by trian-	Wig	73
gulation。		Yak	42
	1	Zig	74

Map T-11035

Map T-11293

Station	Photo No.	iap	1-11200
*****		Station '	Photo No.
Ida	54-0- 280	*	
Nig	280	Lag	54-0-72
Out	279	Pot 1954(Reco	vered) 72
Pet	279	Quo	. 72
Quo (Marked)	2 79 .	Rag	72
Rev	279	Sam	72
Sis	279	Toy	72
Tan	279		
Use	279	į.	;

Map T-11495 (Cont.)

Sta	tion	Photo No.
Alp)	54-0-216
Art		216
Amp	1	216
Bum	ļ	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
Ico		216
Irk		216
Ivy		217
Jar	-	217
Job		215
Jut	-	216
Ked		217
Kin	-	215
Lad		214
Leo		217
Lug Low		. 217
		216
Mag Man		215
Mop		217 217
Mug		
Ned		216 215
Nip		216 216
MOM	(Marked)	
Nut	/	217
Oak		216
Odd		215
Ohm		217
011		217
Pet	-	216

Station	Fhoto 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	282 282
Cob1954 (R	
	282
Cry	282
Day	
Dig1954 (R	
Dip .	282
Ear	282
Egg	281
Fix	282
Gal (Marke	
Her	281
Jay ·	280
Kim	280 -
Leo	280
Mop	280
Sem 1954 (
Marked) 282
Val	282
Wag	282
Yes	282
Zoo	282

Station	Photo No.
Alp	54-0-76
Воъ	. 76
Cow	76
Day	76
Eat	76
Fig *	77
Fly	76
Gag	76
Hat	76
Hex *	. 7 6
Irk	7 6
Ice ≠	76
Job	76
Ked	7 6
Key	187
Lay	7 6
Lug	187
Ma.1	76
Moe	1 86
Nat	76
Nip	186
0ak	1 86
01d . /	7 6
Pad /	186
Rev /	1 86
So1 /	186
Tub	186
Üse	1 86
Wed	/ 186
Wag 🊁	76
Yam *	76
Zoo .	76

* Located also by triangulation.

Map T-11498

Station	Photo No.
Ado	54-0-227
Воъ	227
Cow	227
End	78
Fat	79
Gas	228
Hex	228
Ida	22 7
Joy	227
Set	227
Tora	. 228
Use	227
Van	227
Who	. 227
Yak	227
Zig	227

* 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 Foint. 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 22 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 existence 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, CDR., USC&GS, Comdg., Ship PATTON

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 max 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 southeasthof the true position, Alleother 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.

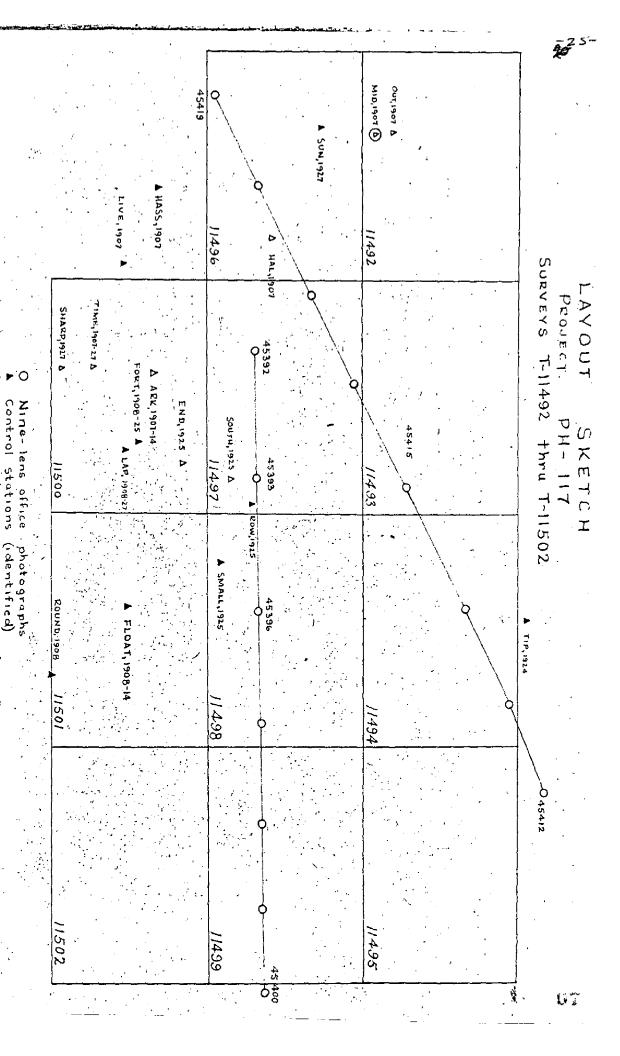
25. PHOTOGRAPHY

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

Supervisory Cartographer

May.



Control

Stations

(office identified)

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 Inler 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:

54-0-32 thru 40

54-0-43 thru 61

-54-0-63

54-0-75 thru:77

54-0-219 thru 225

Templets:

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

Closure and adjustment of control:

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

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

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

9-lens photographs.

The plot was laid in three parts. The first part extended from ROUND, 1908-14 northwest along 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

SUFPLEMENTARY Photogrammetric Plot Report Project Ph-117

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

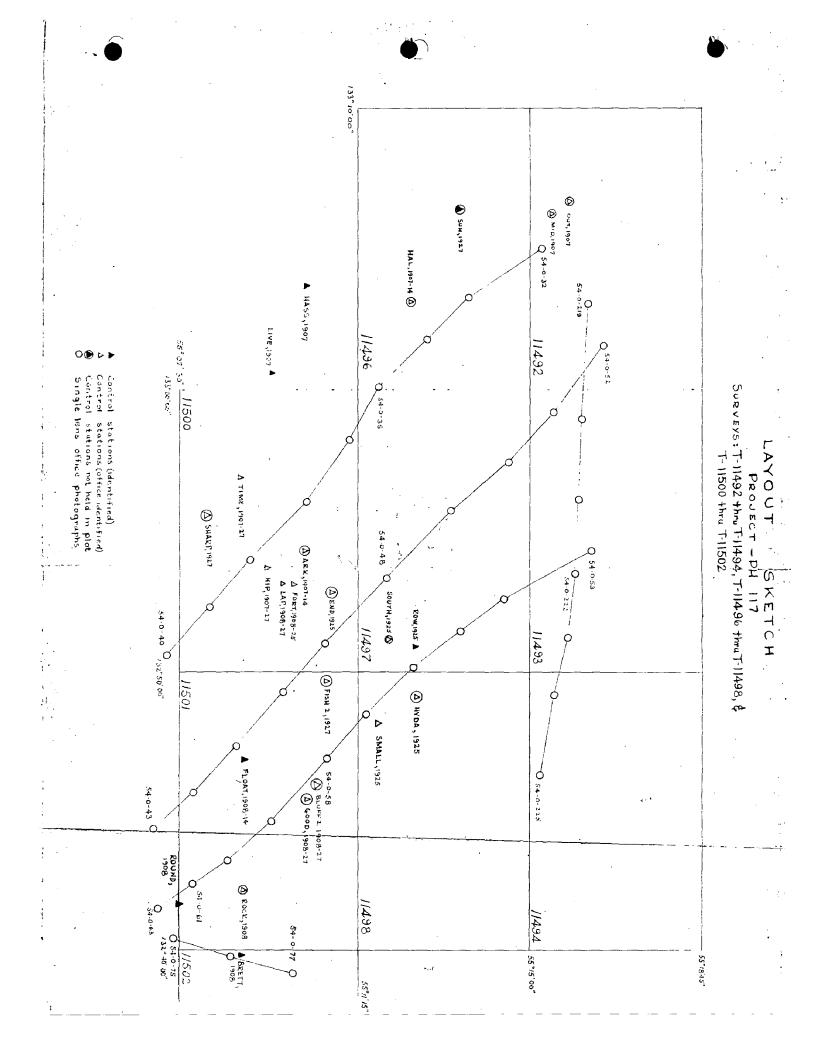
During the 1956 field season the triangulation network was extended northward from Hydaburg with 30 new stations. 22 of these were identified, as well as 17 existing control stations. All new control and identified points were plotted and used to verify the radial plot.

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 Carto. (Photo.)



FORM 164 (4-23-54)

DESCRIPTIVE REPORT U.S. DEPARTMENT OF COMMERCE

PROJECT NO. PH-117

MAP T. 11494

COAST AND GEODETIC SURVEY CONTROL RECORD

SCALE FACTOR SCALE OF MAP 1:10,000

FACTOR DISTANCE
FROM GAID OR PROJECTION LINE
FROM GRID OR PROJECTION LINE
IN METERS (BACK) FORWARD 234.11 (188.3) (1561.0) (1485.3) (BACK) N.A. 1927-DATUM FORWARD 294.5 370.2 871.6 825,5 DATUM DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS (BACK) FORWARD LONGITUDE OR x-COORDINATE 11.970 LATITUDE OR y - COORDINATE 49.341 15 2 64 15 3 3 132 132 DATUM N.A. 1927 = SOURCE OF INFORMATION (INDEX) G-11323 p. 4 Comp. STATION MINK, 1956 MINK, 1956 Sub. Pt.

DATE 1 April 1957

COMPUTED BY. B. Wilson

1 FT. = .3048006 METER

CHECKED BY. E. L. Williams

٠,

DATE 1 April 1957

COMM- DC - 5784

COMPILATION REPORT T-11494

Field Inspection Report:

- -1. Refer to Field Inspection Report, Project 6117, Hetta Inlet and Sukkwan Strait, 1955, USC&GS Ship PATTON, J. C. Partington, commanding. (See Descriptive Report for Survey T-9903).
- 2. Refer to Field Inspection Report for Maps T-11493-497-498, T-11500-501, 1956 season, USCACS Ship PATTON, J. T. Jarman, commanding. (See Descriptive Report for Survey T-11497).

Photogrammetric Plot Report:

- 1. Photogrammetric Plot Report, 1955 for Surveys T-11492 thru-11494, T-11496 thru 11498, T-11500 thru 11502. (See Descriptive Report for Survey T-11497).
- 2. Photogrammetric Plot Report, 1955 for Surveys T-11494; T-11495, T-11496, T-11499; T-11502 and T-9903. (See Descriptive Report for Survey T-11502).

31. DELINEATION

This manuscript was delineated by graphic methods.

1:20,000 scale nine-lens photographs were used in the vertical projector to supplement the single-lens photographs at the north end of Natzuhini Bay.

32. CONTROL

Refer to Photogrammetric Plot Reports.

33. SUPPLEMENTAL DATA

Charts No. 8147 and 8151 used for geographic names.

34. CONTOURS AND DRAINAGE

Contours: Not applicable. Drainage: No comment.

35. SHORELINE AND ALONGSHORE DETAILS

The delineation of the shoreline is based on office interpretation of the photographs, verified by Field Inspection.

The low-water line is based on office interpretation of the 1:20,000 scale nine-lens photographs, which were at an extremly low tide.

36. OFFSHORE DETAILS

No comment.

37. LANDMARKS AND AIDS

None.

CONTROL FOR FUTURE SURVEYS

Three photo-hydro signals have been located on this manuscript and are listed in paragraph 49.

39. JUNCTIONS

Junctions have been made and are in agreement with Survey T-11495 to the east, T-11498 to the south and T-11493 to the west. No comtemporary survey to the north.

LO. HORIZONTAL AND VERTICAL ACCURACY

Refer to Photogrammetric Plot Report.

41. - 45 Inapplicable.

46. COMPARISON WITH EXISTING MAPS

Comparison has been made with Craig, Alaska quadrangle, scale 1:250,000, edition of 1952.

47. COMPARISON WITH NAUTICAL CHARTS

Comparison has been made with the following charts:

Chart No. 8147, scale 1:40,000, edition of 5/28/56. Chart No. 8151, scale 1:40,000 edition of Sept. 1929, corrected to 6/9/52.

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

> Respectfully submitted 11 June 1957

Approved and forwarded

am F. Deane,

CDR, C&GS

Baltimore District Officer

oseph w Voriasek Joseph W. Vonasek

Carto. (Photo.)

August 17, 1970

GEOGRAPHIC NAMES FINAL NAME SHEET PH-117 (Alaska) T-11494

Natzuhini Bay Prince of Wales Island

Wraight

Approved by:

A. Joseph Wraight Chief Geographer

Prepared by:

Cartographic Technician

T-11494

49. NOTES FOR HYDROGRAPHER

The following are the photo-hydro signals located on this manuscript. Position discrepancies from the boat sheets are listed:

KEY PEG - 0.7 mm S of boat sheet position.

- 0.8 mm S of boat sheet position. YOT

Form T-2

170-

PHOTOGRAMMETRIC OFFICE REVIEW

T- 11494

	ept as noted under item 43. /n forno 21	
	PLETION ADDITIONS AND CORRECTIONS TO urnished by the field completion survey have	
41. Remarks (see attached she	et)	V
Revie	wer // Śup	pervisor, Review Section of Unit
40. R. Luan	Cance	h Strinbera
	e Report 38. Field inspection photo	·
33. Geographic names	MISCELLANEOUS . 34. Junctions 35. Legibility of the	manuscript 36-Diccrep
	MICCELLANGOUG	
81. Boundary lines3	2Public land-lines	
	BOUNDARIES	
27: Roads 28: Buildh	igs 29. Railroads 30. Ott	n er-cultural features
	CULTURAL FEATURES	
features	- ,	
	24. Contours in general 25. Spot e	,
20. Water features 21	. Natural ground cover 22. Planete	ble contours 23. Stereos
	PHYSICAL FEATURES	
Snore Contara Toa (ures	-	
shore cultural features		al leatures 13:- \$4000_a00
	imarks 18. Other alongshore physic	-
12 Shoreline 1 12 Law	-water line 14. Rooks, shoals, etc	1 5 Reid nes 15.
	ALONGSHORE AREAS (Nautical Chart Data)	
	ALONGSHOPE APEAS	
9. Plotting of sextant fixes	10. Photogrammetric plot report2	11. Detail points
	raphic stations)7. Photo hydro stat 10. Photogrammetric plot report	
		_
Horizontal control stations of	/ -	
5. Horizontal control stations of	CONTROL STATIONS	4a. Classification label

Review Report T-11494 Shoreline Mapping

August 1970

61. General Statement

(Refer to Summary.) - page 6

62. Comparison with Registered Topographic Surveys

Comparison was made with T-2788 1:20,000 scale dated 1905. This survey is superseded for charting by T-11494.

63. Comparison with Maps of Other Agencies

Comparison was made with USGS Craig (B-3), Alaska, quadrangle, dated 1951, 1:63,360 scale. No significant discrepancies were found in the comparison.

64. Comparison with Contemporary Hydrographic Surveys

Survey T-11494 was used as a base for new hydrography. The contemporary hydrographic surveys 8232 and 8456 (unverified) dated 1955 and 1958, 1:10,000 scale were used for comparison. No significant changes were found in the comparison.

65. Comparison with Nautical Charts

Comparison was made with Chart 8151, 1:40,000 scale, 9th Edition, corrected to February 26, 1968, and 8147, 1:40,000 scale, 5th Edition, corrected to July 3, 1967. No significant changes were found in the comparison.

66. Adequacy of Results and Future Surveys

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

Reviewed by,

Donald M. Brant

Approved by,

Chief, Photogrammetric Branch pro Chief, Photogrammetry D