Form 504

U. S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

| Type of Survey Shoreline (Photogrammetric) |
|--|
| Field No. PH 6117 Office No. T-11502 |
| LOCALITY |
| State ALASKA |
| General locality Cordova Bay |
| Locality Eek Point to Hetta Point |
| |
| 1953-19.55 |
| CHIEF OF PARTY J. C. Partington, Chief of Field Party E. H. Kirsch, Baltimore District Officer |
| LIBRARY & ARCHIVES |
| DATE |

сомм-рс 61300

DESCRIPTIVE REPORT - DATA RECORD

T - 11502

Project No. (II):

Quadrangle Name (IV):

Field Office (II): USC&GS Ship PATTON

Chief of Party: J. C. Partington

Photogrammetric Office (III): Baltimore, Md.

Officer-in-Charge: E. H. Kirsch

instructions dated (ii) (iii): Field: 1/7/55

Office: 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):

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): 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): COPPER 2, 1908

Lat.: 55° 08' 02.253" (69.7n)

Long.: 132° 36° 44.148"(782.2m)

Adjusted Utombokiest

Plane Coordinates (IV):

State: Alaska

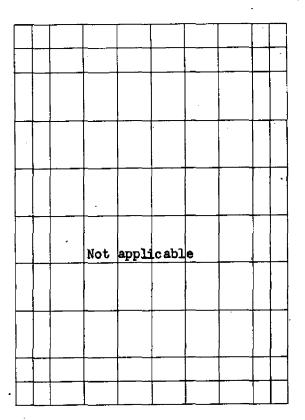
8 Zone:

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

Date: 1955 field season

Planetable contouring by (II):

Date:

Completion Surveys by (II):

Date:

Mean High Water Location (III) (State date and method of location): date of photography field inspection.

Projection and Grids ruled by (IV):

A. Riley

10/19/54 Date:

Projection and Grids checked by (IV):

A. Riley

10/26/54 Date:

Control plotted by (III): J. Steinberg

Date: 12/13/54

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

12/14/54 Date:

Radial Plot 303500350050505

E. L. Williams

H. R. Rudolph

3/8/55 2/27/56

Stereoscopic Instrument compilation (III):

Contours

Planimetry

Date:

Date:

Date:

Manuscript delineated by (III): J. Honick

3/25/55 30

Photogrammetric Office Review by (III): R. Glaser

3/29/56 Date:

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

Date:

U.S. DEPARTMENT OF COMMERCE

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

| PHOTOGRAPHS | am |
|--------------------|----|
| FINDIVORAFIIO | |

| Number | Date | Time | Scale Scale | Stage of Tide |
|-------------------|--------|------|-------------|------------------|
| 41049 | 7/8/53 | 1709 | 1:10,000 | 5.1' above MLLW |
| 54-0-76 & 77 | 6/4/54 | 1110 | Ħ | 1.3' below MLUW |
| 54-0-185 thru 187 | Ħ | 1600 | Ħ | 11.0' above MLLW |

Tide (III) From predicted tide tables Diurnal

Range

9.9

2#

Reference Station: Subordinate Station: Sitka Alaska,

Copper Harbor, Hetta, Inlet

Subordinate Station:

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

Date: JUNE 1970

Ratio of Mean | Spring Range

10.3

Date:

Ranges

Final Drafting by (IV):

Drafting verified for reproduction by (IV): Date:

Proof Edit by (IV): Date:

Land Area (Sq. Statute Miles) (III): 3

Shoreline (More than 200 meters to opposite shore) (III): 16 Shoreline (Less than 200 meters to opposite shore) (III): 1.7

Control Leveling - Miles (II):

2 Identified: Recovered: Number of Triangulation Stations searched for (II): 2

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

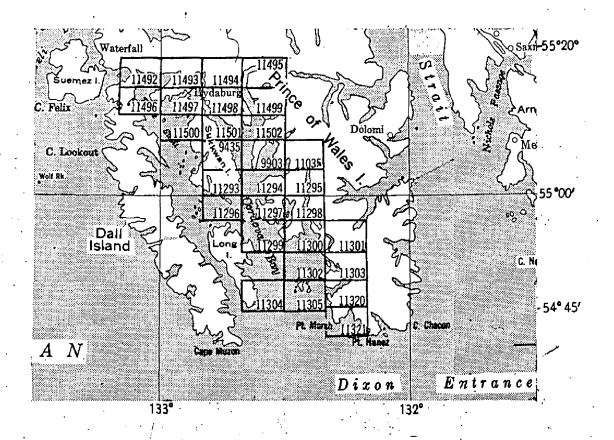
Number of Recoverable Photo Stations established (III): None Number of Temporary Photo Hydro Stations established (III):

Remarks:

*Four stations were established and two were identified during the 1955 season.

COMM- DC- 57842

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



| 1130 | 12 12 |
|---|----------------|
| CFFICIAL MILEAGE FOR COST ACCOUNTS 1130 | 37 37 |
| AREA SQ. LIN.MI. 7 / 11320 | 24 |
| Fisheet no. // Miles // Shoreline [1132] | |
| 9435 | 24 24 |
| 9903 21 21 21 1149: | 12 12 |
| 11035 9 7 9 9 1149 | 2 2 |
| 11293 20 20 11499 | |
| 11,294 | |
| 11295 13 13 149° | 7 |
| 11.296 14 14 14 14 14 11498 | • |
| 11297 21 21 11499 | |
| 11298 23 11500 | |
| 11399 16 16 1150 | |
| 11300 31 31 31 50 | 15 |
| 11301 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | |
| ্11302 ন 🗼 🐪 18-্ জিন্তা 18 🕆 🚉 🔭 🖫 | TOTALS 503 503 |
| 11303 | TOTALIS COLOR |
| こうない ファイン はんしょう 自身 大学者 こうずい おうしょう あんりゅう きゅうしょ | |

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 ninelens 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.

1) (h h) (1)

Donald M. Brant

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 PA-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 FA-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 difficulty was experienced in interpreting features.

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

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-9 | 990 | 3 |
|-----|-----|-----|---|
| | | | |

Map T-9435

| Station | Photo No. | Station | Photo No. |
|--------------|---------------------------------------|----------------|-----------|
| Abe #1 | 54-0-182 | Ace | 54-0-74 |
| Add | 183 | Cut | 42 |
| Bib 1 | 182 | Dip | 74 |
| Big | .183 | Ego | 42 |
| Car | 183 | Gal | 42 |
| Cod | 183 | How | 42 |
| Don | 183 | Ivy | 42 |
| Ear | · 183 | Jib | 42 |
| Era ⇒l | 184 | Key | 75 |
| Fox | 183 | Kim | 42 |
| Gin | 183 | Low | 42 |
| | overed) 182 | Mag | 42 |
| Pie | 41002 | Mex . | 74 |
| Ply *1 | 5 4-0- 181 | Ned | 73 |
| Roy | 182 | Nut | 42 |
| Sal * | 182 | Oak | 72 |
| Try * | 182 | Oil | 42 |
| Van * | 182 | Pal | 42 |
| War = | 182 | Rat | 42 |
| Yet ≎ | <u>4</u> 1002 · | \mathtt{Sip} | 42 . |
| | | Tan | 42 |
| * Located al | lso by sextant | Val | 73 |
| cuts. | · | Vet | 42 |
| | lso by trian- | Wig | 73 |
| gulation。 | · · · · · · · · · · · · · · · · · · · | Yak | 42 |
| | / | Zig | 74 |

Map T-11035

Map T-11293

| Station | Photo No. | map T-11295 |
|--------------|------------------|--|
| | | Station ' Photo No. |
| Ida | 54-0- 280 | |
| Nig | 280 | Lag 54-0-72 |
| Out | 279 | Pot 1954(Recovered) 72 |
| Fet | 279 | Quo |
| Quo (Marked) | 2 7 9 . | Rag 72 |
| Rev | 279 | Sam 72 |
| Sis | 279 | Toy 72 |
| Tan | 279 | |
| Use | 279 | A. Carrier and A. Car |

Map T-11495

Map T-11495 (Cont.) .

| · | | | | 11200 (00100) |
|------------------|-------------|-----|-------------|--|
| Station | Photo No. | | Station | Photo No. |
| Alp | 54-0-216 | | Pin | 54-0-217 |
| Art | 216 | | | |
| Amp | 216 | | Pup | 215 |
| Bum | 216 | | Rag | 217 |
| Bus | 216 | | Rat | 216 |
| Dus But | | | Rig | 215 |
| But | 216 | | Rio | 217 |
| Cab | 215 | • . | Sal | 215 |
| Cat | 216 | | Sol | 228 |
| Сор | 216 | | Sop | 216 |
| Dog | 216 | | Tax | 215 |
| Dot | 215 | : | Tub | 216 |
| Duo | 216 | | Val | 217 |
| Eat | 228 | | Vet | 215 |
| Ego | 216 | | Wag | 215 |
| Emo | 216 | | War | 217 |
| Era | 216 | | | |
| Fez | 216 | • | Was ` | 216 |
| Fin | 228 | | Yam | 216 |
| Fry | 216 | | Yes | 216 |
| Gad | | , | Zoo | 216 |
| | 217 | • | | |
| Gin | 27.0 | | | |
| Gum | 216 | | | · |
| Hoe | 216 | | Map | T-11295 |
| Hop | 217 | | | |
| Hut | 216 | ` | Station | Photo No. |
| Ice | 216 | | | ······································ |
| Irk | 216 | | Add | 54-0-282 |
| Ι ν у | 217 | | Art | 282 |
| Jar | 217 | ÷ , | Bag | 282 |
| Job | 215 | • | Bob | 282 |
| Jut | 216 | • | Cab | 282 |
| Ked | 217 | , | Cob1954 (I | |
| Kin . | 215 | | | |
| Lad | 214 | / | Cry | 282 |
| Lec | 217 | , | Day | 282 |
| Lug | 217 | | Dig1954 (1 | Rec.) 282 |
| Lovi | 216 | | Dip | 282 |
| T10#1 | | • | Ear | 282 |
| Mag | 215 | | Egg | 281 |
| Man | 217 | | Fix | 282 |
| Mop | 217 | 4 | Gal (Marke | ed) 281 |
| Mug | 216 | | Her | 281 |
| Ned | 215 | • | Jay | 280 |
| Nip | 216 | | Kim | 280 |
| Now (Marke | d) 217 ` | | Leo | 280 |
| Nut | 217 | | Mop | 280 |
| Oak | 216 | | Sam 1954 (| |
| Odd | 215 | | Market | |
| Ohm | 217 | • | | |
| 011 | 217 | | Val | 282 |
| ret | 216 | • | Wag | 282 |
| T 00 | . STO | | Yes | 28.2 |
| - | : | | Zoo | 282 |
| | | | | |

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

| | |
|--|---|
| Station | Photo No. |
| Ace Ask Arm Bag Bib Box Cab Cod Cut Day Dip (Marked) Don Dot Ebb Eva Fog Fun Gus How Jug Mar Yum | 54-0-228 78 78 78 228 78 228 78 228 22 |
| Zoa | 78 |

* Located also by triangulation.

Map T-11501

| Station | Photo No. |
|---------|---------------------------|
| Hod | 5 4- 0 - 76 |
| Jap | 76 |
| Ken | , 60 |
| Mid | 59 |
| Nod | 60 |
| Ora | 60 |
| Rio | 61 |

Map T-11494

| | Photo No | |
|---------|----------|--|
| Key . 5 | 4-0-228 | |
| 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 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 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, CDR., USC&GS/ Comdg., Ship PATTON



PHOTOGRAMMETRIC PLOT REPORT
Project Ph-117
Surveys Nos. T-11494, T-11495,
T-11498, T-11499,
T-11502 & T-9903

21. AREA COVERED

This radial plot report covers the entire area of Surveys Nos. T-11495, T-11499, T-11502; the eastern portions of T-11494 and T-11498, and part of T-9903. These are all shoreline surveys located along Hetta Inlet, north of Cordova Bay, Prince of Wales Island, Alaska.

22. METHOD - RADIAL PLOT

Map Manuscripts:

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

The position 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.

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 plet.

The twenty (20) single lens photographs used are numbered as follows:

54-0-75 through 79 54-0-183 54-0-185 thru 188 54-0-191 and 192 54-0-214 through 218 54-0-227 through 229

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.

Pass points already established on manuscripts T-9435 and T-9903 from previous plots were also transferred to the base sheets. Additional pass points, established in a 1:20,000 scale plot with nine-lens photographs, were transferred graphically to the 1:10,000 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 grid intersections on the 1:20,000 scale base sheets. The templet was oriented over the corresponding grid intersection on the 1:10,000 base sheets and the point pricked through to the base sheet.



22. METHOD -- RADIAL PLOT (CONT'D)

Closure and Adjustment of Control: (cont'd)

For additional information about this supplementary control see the photogrammetric plot report for the 1:20,000 radial plot of Surveys T-11492 thru T-11502. The report for that plot is made a part of Descriptive Report for Surveys T-11492 thru T-11494, T-11496 thru T-11498 and T-11500 thru T-11502.

The plot was laid starting with the templets for photograph 54-0-183, and proceeding northward to photograph 54-0-188. Then the templets for photographs 54-0-75 through 54-0-79 were laid. It was found that the templet for photograph 54-0-184, could not be held in this plot because of excessive tilt. With this templet left out it was possible to lay these two flights in a tight plot helding the control; the pass points established in previous plots; and the supplementary control established in the 1:20,000 plot. Then flights 54-0-227 through 229 and 54-0-214 through 54-0-218, which depended almost wholly for control on the supplementary points established in the 1:20,000 plot were adjusted. Lastly, the templets for photographs 54-0-191 and 192 were fitted into the plot.

The following conditions greatly affected this plots (1). Between photographs 54-0-77 and 78 there was a definite break in the plot because of insufficient overlap along the flight line. (2) A break, also, occurred on the east side where photographs 189 and 190 were left out of the plot, because no shoreline was on these photographs which showed a mountainous and show-covered area. These were omitted because in tilted photographs any points of extreme elevation hinder the development of a plot rather than aid it. (1) Photographs 193, 219, 230, 231 and 232 were not used in the plot because little or no shoreline appeared on them and they also would not materially strengthen the plot.

Breaks in the flight lines and photographs omitted from the plot lead to the creation of many two-radial intersections. In most cases this could not be avoided because of poor overlap on the photographs. However, most of the photographs were fixed by supplementary control points from the 1:20,000 plot.

Transfer of Points:

The positions of all photograph centers and pass points were transferred to the manuscript 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 could not be held, only the positions established in this 1:10,000 scale plot were shown on the manuscript.

23. ADEQUACY OF CONTROL

As the plot was started it was necessary to hold to pass points established in previous plots of the area. Of the three control points in the area it was possible to hold only BRETT, 1908. CEDAR 2, 1908 was not held in any plots of the area and in this plot fell 18 meters north of the true sposition. COPPER 2, 1908 was very difficult to identify and was not held where identification was attempted.

23. ADEQUACY OF CONTROL (cont'd)

As the plot was extended northward the only control available was those points established in a previous plot of the area at a scale of 1:20,000.

Positions in the northern part of Hetta Inlet are probably weak and may be in error 1 mm, or more, in geographic position.

24. SUPPLEMENTAL DATA

Supplementary control extablished 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 radial plot report for surveys in this area.

25. PHOTOGRAPHY

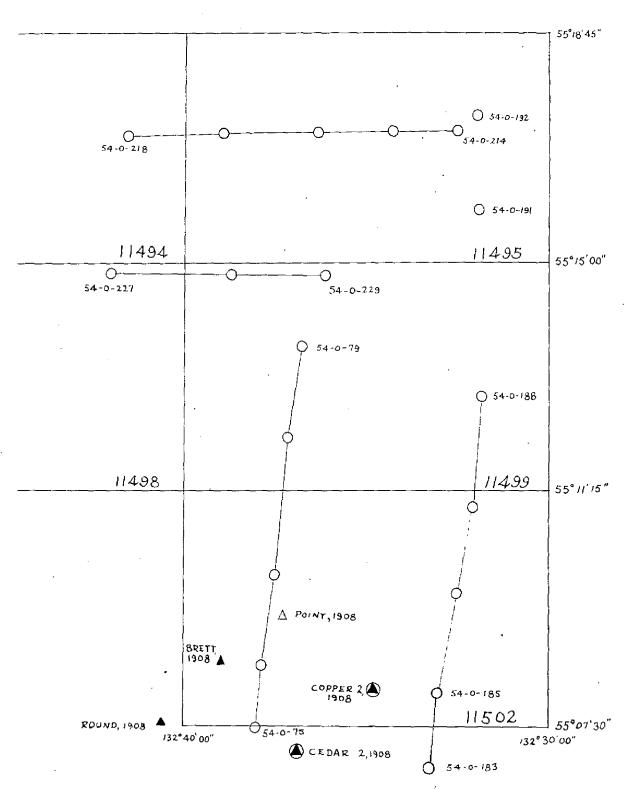
In certain areas the definition was very good, but in others, possibly due to the process of enlarging the photographs, it was poor. The photograph coverage was inadequate in that breaks occurred in the flight lines because of insufficient overlap. This, was evident throughout photography in this area.

Photograph 54-0-184 was too badly tilted to be used in the radial plot.

Respectfully submitted 8 March 1955

E. L. Williams, Carto. Photo. Aid

LAYOUT SKETCH PROJECT PH - 117 SURVEYS-11494,11495, 11498,11499, \$ 11502



- O Single lens office photographs
- ▲ Control stations (identified)
- A Control stations (not identified)
- Control stations not held in plot

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

21. AREA COVERED

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

22. METHOD - RADIAL PLOT

Map Manuscripts:

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

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

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

Photographs:

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

Templets:

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

Closure and adjustment to control:

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

Transfer of points:

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

23. ADEQUACY OF CONTROL

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

An attempt was made to identify MID, 1907, in the office to strengthen the plot, but it could not be held. The radially plotted position fell 30 meters 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

Frank J. Warcza U Supervisory Cartographer

| 20 - | | -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 - | 004 | | | | <u></u> | -22 |
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| 45412 | | | | • | | | | |
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SUPPLEMENTARY
PHOTOGRAMMETRIC PLOT REPORT
Project 6117,
Surveys No. T-9435, T-9903,
T-11499, T-11501
and T-11502

21. AREA COVERED

This radial plot covers the entire area of surveys No. T-9435, T-11502; the easternhalf of survey No. T-11501; the southern half of Survey No. T-11499; and the western part of T-9903. These are shoreline surveys located along Hetta Inlet and Sukkwan Strait. This radial plot was reconstructed in accordance with instructions dated 24 January 1956.

22. METHOD - RADIAL PLOT

Map Manuscripts:

Vinylite sheets with polyconic projections in black and Universal. Transverse Mercator, Alaska, zone B, grids in red at a scale of 1:10,000 were furnished by the Washington Office. These surveys were compiled as incomplete manuscripts during 1954 and 1955. Black line impressions of each of the incomplete manuscripts were furnished in 1956, by the Washington Office.

The positions of all hydrographic signals, computed by the hydrographic party, five new control stations, and an additional substitute station for triangulation station BRETT, 1908-14, were plotted on the manuscripts 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.

Photographs:
One unmounted nine-lens photograph, No. 41002, taken 8 July 1953, at a scale of 1:10,000 was used in the plot.

In addition to this nine-lens photograph, twenty (20) single lens photographs taken 4 June 1954, with the "O" camera at a scale of 1:27,500 and ratioed to scale of 1:10,000 were used in the plot. They are numbered as follows:

54-0-42 and 54-0-43 54-0-59 thru 54-0-61 54-0-63 and 54-0-64 54-0-72 thru 54-0-78 54-0-182 and 54-0-183 54-0-185 thru 54-0-188

Single lens photograph No. 54-0-184 was not used in the plot because of excessive tilt. Single lens photograph No. 54-0-62 was not used in the plot because of the very close spacing in line of flight between 54-0-61, 54-0-62 and 54-0-63.

Standard symbols were used on the photographs.

22. METHOD - RADIAL FLOT (CONT'D)

Templets:

Vinylite templets were made for all photographs. The master templet was used to make adjustments for paper and film distortion on all single lens photographs except No. 54-0-182 which did not have fiducial marks. The master templet was used to make corrections for paper and film distortion and chamber displacement on the ninelens photograph.

Closure and Adjustment of Control:

The blackline impressions of incomplete manuscripts No. T-11499, T-11501 and T-11502 were used as base sheets. Vinylite base cheets were prepared in this office for surveys No. T-9435 and T-9903, because of scale difference and distortion in the blackline impressions.

Since there was discrepancy between the grids as shown on surveys No. T-9435 and T-11501 and between surveys No. T-9903 and T-11502, the projection intersections along the southern limits of surveys No. T-11501 and T-11502 were transferred to the base sheets holding the grid intersections on blackline impressions of T-11501 and T-11502.

All control, pass points, and photograph centers on surveys No. T-9435 and T-9903; control stations ATA, 1918 and LIME 2, 1954 located on survey No. T-11294; control station GRASS, 1905 - 18; and photograph center 54-0-72 were then transferred to the base sheets by matching common projection intersections.

The radial plot was then reconstructed on the base sheets.

The templets for photographs 54-0-182 thru 54-0-188 were laid but photograph No. 54-0-184 was tilted and could not be used in the plot. The flight 54-0-72 to 54-0-78 was then laid. Neither of these two flights could be held to all of the newly established control. After several adjustments to the templets in each flight, satisfactory intersections were made at the points which were common to both flights.

The templet for \$1002\$ was laid and verified the points as established by the two flights of single lens photographs.

The templets for photographs 54-0-59 thru 54-0-64 were then laid starting with 54-0-64. Finally the templets for photographs 54-0-42 and 54-0-43 were laid and a satisfactory plot made. The following control ∞ uld not be held in the plot:

Hydrographic stations ABE, BIB, FIG and ICE.
Triangulation stations LOG, 1908-14; CLOSE, 1908-14;
POINT, 1908; and EASY, 1908-14.

Transfer of Points:

The positions of all photograph centers and pass points, which were moved by this plot, 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 the photograph centers and pass points in Survey T-11499 may be weak because there are only two identified control points in this survey. These stations appear only on photograph No. 54-0-78.

These two control points, MAR and SIMON, 1955; controlled the north-south movement of photograph No. 54-0-78, but not the movement in the east-west direction. Therefore, since all of the pass points that had been established by the previous plots could be held with the control, they were used to orient the photograph. However, when the photograph was oriented beneath the manuscript hydro MAR, as identified by the Hydrographic Farty, fell about 0.5 mm east of its computed position when the pass points were held in adjustment. The pricking of Hydro Station MAR was examined and the point repricked on another rock farther inshore, that also answered the description of the signal.

As previously stated, several other control stations could not be held in the plot. They are:

Hydro signal ABE, 1955: The radially plotted position of the signal falls 0.9 mm northeast of its geographic position. Several other control points in the area were held on all of the photographs along with the pass points as previously established. Either the identification or the position of the signal is in error.

Hydro Signal BIB, 1955: The radially plotted position of this signal falls 1.0 mm east southeast of its geographic position. The position of this signal is believed to be in error. The radially plotted location is radial along the theodolite azimuth from FOG, 1908.

EASY 2, 1908-14: The radially plotted position of this station falls 0.2 mm north of its geographic position. The identification is probably in error as this station was identified in a wooded area along the shoreline. Sub Pt. A ROUND, 1908-14 was held instead of EASY 2-1908 - 14.

Hydro signal ICE, 1955: The radially plotted position of the signal, as identified by the Hydrographic Party, falls 1.5 mm south of its geographic position. Several other control points in the area were held in the plot. The photographs were carefully examined and another points, which agrees with the description, was identified in the compilation office. This office identification holds in the plot.

POINT, 1908: The radially plotted position of the station as identified by the hydrographic party, falls 1.4 mm southwest of its geographic position. Only two photographs show this station. The hydrographic party identified the station on photograph 54-0-76 and their identification held radially in the plot. However, when their identification was transferred to photograph 54-0-77 it was found that the identification was in error radially. The point was re-identified according to its description. The office identification now holds in the radial plot.

23. ADEQUACY OF CONTROL (contid)

Hydro signal FIG, 1955: This signal falls on only one photograph. The signal as identified by the Hydrographic party falls approximately 3.0 mm northeast of its geographic position. It was identified in a wooded area and the identification is believed to be incorrect. No radially plotted position could be shown. The field position was accepted.

CEDAR, 2, 1908: A substitute station was identified in 1954. A radially plotted position of the substitute station was established 2.7 mm north of its position by the previous plot. The Hydrographic Party identified the station direct in 1955. However, the radial lines for the new identification of the station held the same radially plotted position of the substitute station. This station was identified among trees the "layover" of which completely obscure the shoreline.

LOG, 1908-14: The radially plotted position of this station falls 02. mm west of its geographic position. ROCK, 1908-14 was given preference.

CLOSE, 1908-14: The radially plotted position of this station falls 0.6 mm northeast of its geographic position. The identification of this station is probably incorrect.

BRETT, 1908-14: This station was identified by sub. pts. A and B in 1954. The hydrographic party identified sub. pt. C in 1955. Sub. pt. C was held in this plot and a radially plotted position of sub. pt. B was established 0.2 mm west of its computed position with the result that some changes occured in the pass points located along the northern shoreline of Sukkwan Strait between BRETT, 1908-14 and ROCK, 1908-14.

New positions were established for a few of the pass points and photograph centers. The maximum novement of any pass point or center was approximately 0.5 m.m. There were no changes large enough to cause the jumps in hydrography. Those were probably due mainly to accumulative effects of errors in identification and position.

24. SUPPLEMENTAL DATA

None.

25. PHOTOGRAPHY

The overlap between flights on the east and west sides of Hetta Inlet was mostly in the water area with very few identifiable points common to the two flights.

The overlap in line of flight between photographs 54-0-77 and 54-0-78 was approximately 20 percent. The side lap between the 54-0-77 to 54-0-78 flight and the 54-0-186 to 54-0-188 flight was also only about 20 percent which made it very difficult to get any common points in the overlap areas.





25. PHOTOGRAPHY (cont'd)

. Photograph 54-0-184 was tilted to such an extent that it could not be used in the plot. The photograph was oriented under the manuscript holding to the shoreline points along the east shoreline of Hetta Inlet and an approximate center was then located on the manuscript.

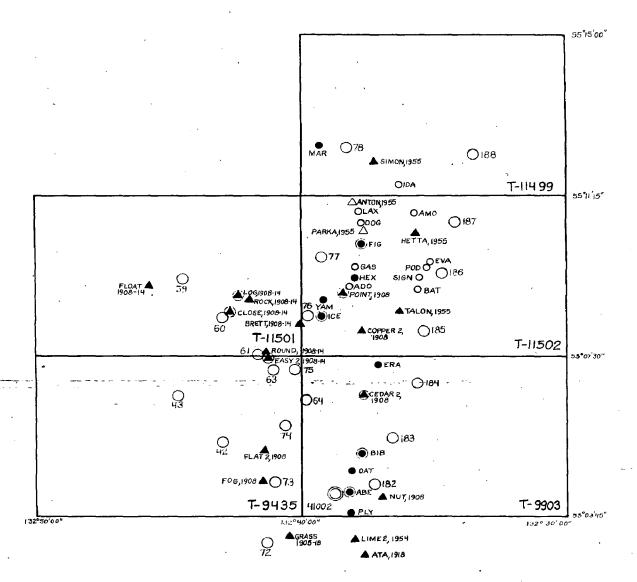
The office photograph No. 54-0-182 was unavailable to this office. The field photograph was used in the plot. This field photograph did not contain any fiducial marks.

Respectfully submitted 27 February 1956

H. R. Rudolal

H. R. Rudolph Carto. Photo. Aid





LAYOUT SKETCH PROJECT NO.6117 SURVEYS NOS. T-9435,T-9903,T-11499,T-11501 AND T-11502

NINE LENS PHOTOGRAPH

NINGLE LENS PHOTOGRAPH

△ TRIANGULATION STATION (Not identified)

▲ TRIANGULATION STATION (Identified)

▲ TRIANGULATION STATION (Not held in plot)

O HYDRO SIGNAL (Not identified)

HYDRO SIGNAL (Identified)

• HYDRO SIGNAL (Not held in plot)

FORM **164** (4-23-54)

COAST AND GEODETIC SURVEY DESCRIPTIVE REPORT U.S. DEPARTMENT OF COMMERCE

CONTROL RECORD

FROM GR.D OR PROJECTION LINE FROM GRID OR PROJECTION LINE (N METERS) COMM- DC- 5784 (BACK) FORWARD 1/31/56 SCALE FACTOR 30.3) (831.8) (1120.6)(238.8) (1642.3) (1783.1)(674.1) (1089.1)312.2) (762.6) (280.9) (283.0)838.5) 335.9) 380.6) (1595.3)(1058.0)(1074.5) (862.0) 69.7 (1785.8) 646.5) (820.8) (BACK) N.A. 1927 - DATUM 213.2 230.7 388.5 300 • 2 782.2 734.8 781.0 749.8 993.4 1616.6 241.9 72. L 766.3 780.1 224.3 726.1 1209.0 260.1 1825.1 681.4 FORWARD CHECKED BY E. L. Williams DATUM SCALE OF MAP 1:10,000 OR PROJECTION LINE IN METERS DISTANCE FROM GRID IN FEET. (BACK) HYDROGRAPHIC SIGNALS FORWARD PROJECT NO. 6117 41.02\$ LONGITUDE OR x-COORDINATE 21.938 24.781 25.255 14.148 59,020 39.095 32,125 16.949 00.211 42.362 52.277 06.893 LATITUDE OR y.COORDINATE 13,658 12.664 08-111 13,029 02,253 1/30/58 39 38 8 36 36 유 X 임 8 8 36 ដ 35 38 8 8 ဗ 8 39 8 Ħ 33 132 132 132 55 3 132 132 132 132 公 132 132 ኢ 2 132 ያ 껐 3 35 汉 쮰 132 Unadj. Field Comp. DATUM N.A. 1927 ŧ ¤ E = = E = 2 G-10977 Form 28B p. 2 G-10977 Form 28B ps 1 G-10977 Form 28B p. 1 SOURCE OF INFORMATION 0-609 p• 346 G-609 P- 347 COMPUTED BY, H. R. Rudolph (INDEX) Comp Comp. = # = = MAP T. 11502 (FT. = .3048006 METER 2, 1908 COPPER 2, 1908 STATION HETTA, 1955 PARKA, 1955 TALON, 1955 HETTA, 1955 POINT, 1908 ANTON, 1955 1955 XAM, 1955 ADO, 1955 Sub. Pt. Sub. Pt. COPFER ICE,

DATE

DATE

U.S. DEPARTMENT OF COMMERCE DESCRIPTIVE REPORT

COAST AND GEODETIC SURVEY CONTROL RECORD

| MAP T. 11502 | | PROJECT NO. | CT NO | 6117 | 1 | SCALE OF MAP. | 1:10,000 | SCA | SCALE FACTOR | Ψ. |
|----------------------|-------------------------------------|-------------|--|-----------|----------------------|---|-------------|---|--|---|
| STATION | SOURCE OF INFORMATION (INDEX) | DATUM | LATITUDE OR y-COORDINATE LONGITUDE OR x-COORDINATE | OR #-COC | ORDINATE ORDINATE | DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS FORWARD (BACK) | DATUM | | N.A. 1927 - DATUM DISTANCE FROM GELD OR PROJECTION LINE IN METERS FORWARD (BACK) | FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK) |
| | | | HY | HYDRO GRA | HIC | STATIONS (cont'd) | | | | |
| HEX, 1955 | G-10477 | Unadj. | 浆 | 60 | 20,860 | | | 645.1 | (1210,4) | |
| | Form 26 | field for | 132 | 38 | 05.367 | | | 95.0 | (7.296) | |
| GAS. 1955 | # | = | 55 | 60 | 40.022 | | | 1237.6 | (617.8) | |
| | | | 132 | 38 | 01,003 | | | 17.8 | (1044.5) | |
| क्रातः 10 द्वर | E | = | 55 | ន | 11,562 | | | 357.5 | (1,97.9) | |
| | | | 132 | 37 | 46,431 | | | 821.9 | (240.2) | |
| | 2 | | 55 | 60 | 266°ħ0 | | | 154.5 | (1700.9) | |
| DAI, 1722 | | : | 132 | 35 | 43.383 | | | 768.3 | (294.3) | |
| STON 1955 | E | = | 55 | 60 | 22,109 | | | 683.7 | (1171.7) | |
| (//* 6 m) TO | | | 132 | 35 | 35.885 | | | 635.5 | (427.2) | |
| POD. 1955 | = | = | 55 | 60 | 35.845 | | | 1108.5 | (747.0) | |
| | | | 132 | 35 | 18,868 | | | 334.1 | (728.3) | |
| RVA. 1955 | = | # | 55 | 80 | 45.850 | | | 1417.9 | (437.6) | |
| | | | 132 | 35 | 08.1/11 | | | 144.1 | (918,2) | |
| אאס. וסקצ | E | = | 55 | 10 | 36.946 | | | 1761.0 | (4.46) | - 3 |
| | | - 1 | 132 | 35 | 44.169 | | | 781.6 | (1280,1) | a |
| | G-10977 | - μ | 55 | 10 | 36.401 | | | 1125.7 | (729.8) | , |
| LUG, 1955 | p. 3 | , | 132 | 37 | 52.046 | | | 921.2 | (140.8) | |
| LAX. 1955 | = | = | 55 | 10 | 52.398 | | | 1620.4 | (235.1) | |
| | | | 132 | 37 | 53.671 | | | 949.8 | (112.0) | |
| | | | | | | | | | | -31 |
| | | | | | | | | | | |
| 1 FT.=.3048006 METER | R. Rudolph | | 30 | Tannar. | 10 5% | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | . 144114 pr | | 71 TE | com. bc. 5784 |
| COMPUTED BY: *** *** | | φ'O | DATE | 3 | of the state of | CHECKED BY: *** | ******* | *************************************** | DATE /* . |) / / + · / |

COMPILATION REPORT T-11502

Field Inspection Report:

Refer to the Photogrammetric Field Inspection Report, Project 6117, Hetta Inlet and Sukkwan Strait, 1955, USC&GS Ship PATTON, J. C. Fartington, commanding. (See Descriptive Report for survey T-9903).

Photogrammetric Plot Report:

- 1. Photogrammetric Plot Report (1955) for surveys T-11492 thru T-11502 which will be part of the Descriptive Report for survey T-11497.
- 2. Photogrammetric Plot Report (1955) for surveys T-11494, T-11495, T-11498, T-11499, T-11502 and T-9903, which is part of this report.
- 3. Photogrammetric Plot Report (1956) for surveys T-11499, T-11501, T-11502, T-9435 and T-9903, which is part of the Descriptive Report for survey T-9903.

31. DELINEATION

This manuscript was delineated by graphic methods. In areas where the shoreline was obscured by shadows or relief displacement, the shoreline was shown with a broken line.

The west shore of Hetta Inlet north of station POINT, 1908 was delineated from 1:20,000 scale nine-lens photographs using the vertical projector. Due to lack of overlap between single lens photographs 54-0-77 and 78, detail points were located in the vertical projector to make junction with the single lens photographs.

The shoreline of Nutkwa Inlet which had been previously delineated was transferred from survey T-9903.

Some small changes in the delineation had to be made as a result of the 1956 radial plot which was based on the new control in this area.

32. CONTROL

Refer to the Photogrammetric Plot Reports. Although a triangulation position was available for thirteen of the hydrographic signals, they were shown with circles because they are not monumented and recovery may be doubtful. They were not described.

33. SUPPLEMENTAL DATA

A copy of boat sheet PA 1355 was available for purposes of comparison.

34. CONTOURS AND DRAINAGE

Contours: Inapplicable.
Drainage: No comment.

35. SHORELINE AND ALONGSHORE DETAILS

The delineation of the shoreline is based on office interpretation of the photographs. North of station POINT, 1908, the nine-lens photographs 45398 and 45399 were used in the vertical projector.

The low water line is based on office interpretation of the photographs which are at an extremely low stage of tide. Along the east shore of Hetta Inlet, the low water line was taken from the mine-lens photographs.

Upon receipt of the boat sheet and the descriptions of the photohydro signals, the shoreline was corrected at several places. No other shoreline inspection was furnished.

36. OFFSHORE DETAILS

No rock elevations were transferred from the boat sheet.

37. LANDMARKS AND AIDS

None.

38. CONTROL FOR FUTURE SURVEYS

Thirty-one photo-hydro signals have been located on this manuscript and are listed in paragraph 49. In addition, thirteen signals located by triangulation are shown. (See paragraph 32.)

39. JUNCTIONS

Junctions have been made with surveys T-11499 to the north, T-11501 to the west and T-9903 to the south. There is no junction to be made at this time with survey T-11516 (Project 6148) to the east.

40. HORIZONTAL AND VERTICAL ACCURACY

Refer to the Photogrammetric Plot Reports.

41 - 45

Inapplicable.

46. COMPARIS ON WITH EXISTING MAPS

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

47. COMPARISON WITH NAUTICAL CHARTS

Chart 8147, scale 1:40,000 published August 1931, corrected to 10/8/54.

Items to be applied to nautical charts immediately: None.

Items to be carried forward: None.

Respectfully submitted 7 March 1956

Jack Honick

Carto. Photo. Aid

Approved and Forwarded

E. H. Kirsch, Capt. C&GS

Baltimore District Officer

August 6, 1970

GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-117 (Alaska)

T-11502

Copper City

Eek Inlet

Eek Point

Hetta

Hetta Inlet

Hetta Lake

Hetta Point

Nutkwa Inlet

Nutkwa Lagoon

Prince of Wales Island

Approved by:

A. Joseph Wraight/ Chief Geographer

Prepared by:

Frank W. Pickett// Cartographic Technician

T-11502

49. NOTES FOR HYDROGRAPHER

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

1954 Season:

GUN

STU

JOT

1955 Season:

| ALP | HAT | MAL | REV |
|-----|-----------------|-----------------|-----|
| BOB | IRK | MOE | SOL |
| COM | JOB | NAT - 1.1 mm HW | TUB |
| DAY | K E D | NIP | USE |
| EAT | KEY | OAK | WAG |
| FLY | LAY - 0.9 mm NW | OLD - 0.6 mm W | WED |
| GAG | LUG | PAD | 200 |

The following signals were plotted from the field computed positions. They are shown with circles because they are not monumented stations nor described, and recovery may be doubtful.

| ADO | EVA | LAX |
|-----|-----|------|
| AMO | FIG | POD |
| BAT | GAS | SIGN |
| DOG | HEX | MAY |
| | ICE | |

The discrepancies at NAT, OLD and LAY are due to changes made by the radial plot as re-run in 1956.

50-

PHOTOGRAMMETRIC OFFICE REVIEW

T. 11502

| 1. Projection and grids2. Title3. Manuscript numbers4. Manus | cript size |
|--|-----------------------|
| CONTROL STATIONS 4s. Clausific | ration label |
| 5. Horizontal control stations of third-order or higher accuracy 6: Receverable horizon | ntal stations-of less |
| than third-order accuracy (topographic stations)7. Photo hydro stations8. Be | ench marks |
| 9. Plotting of sextant fixes10. Photogrammetric plot report11. Detail points | ; <u>/</u> |
| ALONGSHORE AREAS | |
| (Nautical Chart Data) | |
| 12. Shoreline13. Low-water line 14. Rocks, shoals, etc 15. Bridget | s1 6. Aids - |
| to navigation17. Landmarks =18. Other alongshore physical features | _ 19. Other along - |
| shore cultural features | |
| | • |
| PHYSICAL FEATURES | |
| 20. Water features 21. Natural ground cover 22. Planetable contours | 23. Stereoscopic |
| instrument contours 24. Contours in general 25. Spot elevations | |
| features- | - , , |
| | |
| CULTURAL FEATURES | |
| 27. Roads 28. Buildings 29. Railroads 30. Other cultural features | • |
| 27 Hoods 50. Other contains | |
| BOUNDARIES | |
| 31. Boundary lines 32. Public land-lines | |
| 34. Summary miss | |
| MIGGELLANIFOLIS | |
| MISCELLANEOUS 33. Geographic names 34. Junctions 35. Legibility of the manuscript | 25 - Di |
| | |
| 37. Descriptive Report 38. Field inspection photographs 39 |), Forms |
| Reviewer Supervisor, Review Section | ordnit |
| V | |
| 41. Remarks (see attached sheet) | - |
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| FIELD COMPLETION ADDITIONS AND CORRECTIONS TO THE MANUSCRIPT | |
| 42. Additions and corrections furnished by the field completion survey have been applied to the manuscript is now complete except as noted under item 43. Inform a fion is not a | manuscript. The |
| Compiler Supervisor | |
| 43. Remarks: | M.2561-12 |

Review Report T-11502 Shoreline Mapping

August 1970

61. General Statement

Differences in some rock elevations were found between photogrammetric survey T-11502 and hydrographic survey 8133 (refer to Summary, "Rock Elevations"). These elevations were removed from T-11502.

The following field data was used during final review:

Field inspection photographs (hydro signals only) 54-0-75 thru 77 54-0-185 thru 187

62. Comparison with Registered Topographic Surveys

Comparison was made with the following topographic surveys:

T-2231, 1:80,000 scale, dated 1897 T-2788, 1:20,000 scale, dated 1905

These surveys are superseded for charting by T-11502.

63. Comparison with Maps of Other Agencies

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

64. Comparison with Contemporary Hydrographic Surveys

Survey T-11502 was used as a base for new hydrography. The following contemporary hydrographic surveys were used for comparison:

H-8133, 1:10,000 scale, dated 1955 H-8230, 1:10,000 scale, dated 1954 H-8231, 1:10,000 scale, dated 1955

The agreement is good.

-2-

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,

Chief, Photogrammetric Branch pt Chief, Photogrammetry Division