

10721

10721

FORM C&GS-504

U.S. DEPARTMENT OF COMMERCE
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Type of Survey **SHORELINE**Field No. Office No. **T-10721**

LOCALITY

State **ALASKA**General locality **KUIU ISLAND - SUMNER STRAIT**Locality **BEAUCLERC ISLAND**1955-62

CHIEF OF PARTY

J. E. Waugh, Chief of Field Party

J. Steinberg, Acting, Baltimore Photo Office

Alfred C. Holmes, Director, A. M. C.

LIBRARY & ARCHIVES

DATE

DESCRIPTIVE REPORT - DATA RECORD

T- 10721

1

| | | |
|--|--------------------------------------|---|
| SUBJECT NO. (II): PH-5702 | | |
| FIELD OFFICE (II): SHIP HODGSON | | CHIEF OF PARTY J. E. Naugh |
| PHOTOGRAMMETRIC OFFICE (III): Baltimore | | OFFICER-IN-CHARGE (acting) J. Steinberg |
| INSTRUCTIONS DATED (II) (III): October 29, 1957 Project Diagram November 27, 1957 22/MEK, S-2-HO November 20, 1957 Office September 11, 1959 Office | | |
| METHOD OF COMPILATION (III): Graphic | | |
| MANUSCRIPT SCALE (III): 1:10,000 | | STEREOSCOPIC PLOTTING INSTRUMENT SCALE (III): |
| DATE RECEIVED IN WASHINGTON OFFICE (IV): | | DATE REPORTED TO NAUTICAL CHART BRANCH (IV): |
| APPLIED TO CHART NO. | DATE: | DATE REGISTERED (IV): |
| GEOGRAPHIC DATUM (III): N. A. 1927 | | VERTICAL DATUM (III): M. H. W. 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): SUN 1929 | | |
| LAT.: 56° 16' 26.951" (833.6 M) | LONG.: 133° 54' 47.919" (824.6 M) | <input checked="" type="checkbox"/> ADJUSTED <input type="checkbox"/> UNADJUSTED |
| PLANE COORDINATES (IV): Y = 6,236,910.00 m. X = 567,294.80 m. | | STATE Alaska |
| | | ZONE UTM 8 |
| ROMAN NUMERALS INDICATE WHETHER THE ITEM IS TO BE ENTERED BY (II) FIELD PARTY, (III) PHOTOGRAMMETRIC OFFICE, OR (IV) WASHINGTON OFFICE. WHEN ENTERING NAMES OF PERSONNEL ON THIS RECORD GIVE THE SURNAME AND INITIALS, NOT INITIALS ONLY. | | |

DESCRIPTIVE REPORT - DATA RECORD

T-10721

2

| | | |
|---|------------|---|
| FIELD INSPECTION BY (II): G. L. Short, H. H. Druebert, R. D. Bernard & R. E. Alderman | | DATE: April-May 1958 Sept.-Oct 1958 |
| MEAN HIGH WATER LOCATION (III) (STATE DATE AND METHOD OF LOCATION): Office interpretation of 1955 photographs supplemented by field edit in 1962. | | |
| PROJECTION AND GRIDS RULED BY (IV): P. J. Dempsey | | DATE 11-02-59 |
| PROJECTION AND GRIDS CHECKED BY (IV): P. J. Dempsey | | DATE 11-02-59 |
| CONTROL PLOTTED BY (III): B. Wilson | | DATE 11-12-59 |
| CONTROL CHECKED BY (III): H. R. Rudolph | | DATE 11-20-59 |
| RADIAL PLOT OR STEREOSCOPIC CONTROL EXTENSION BY (III): L. A. Senasack | | DATE 6-10-60 |
| STEREOSCOPIC INSTRUMENT COMPILATION (III): Not applicable | PLANIMETRY | DATE |
| | CONTOURS | DATE |
| MANUSCRIPT DELINEATED BY (III): B. Wilson | | DATE 7-18-60 |
| XXXXXXXX (III): Field edit corrections applied by: J. S. Cregan | | DATE 9-18-62 |
| PHOTOGRAMMETRIC OFFICE REVIEW BY (III): Field edit reviewed by: R. Glaser H. R. Rudolph | | DATE 7-25-60 9-19-62 |
| REMARKS: | | |

DESCRIPTIVE REPORT - DATA RECORD
T-10721

3

AREA (KIND OR SOURCE) (III):

Wild RC-8 "W"

PHOTOGRAPHS (III)

| NUMBER | DATE | TIME | SCALE | STAGE OF TIDE |
|---------------------|------------|-------|----------|---------------------|
| 55 W 9583 thru 9585 | 21 Sept 55 | 15:28 | 1:25,000 | 11.1 ft. above MLLW |
| 55 W 9644 | 22 Sept 55 | 09:35 | " | 4.4 ft. " " |
| 55 W 9671 thru 9674 | 22 Sept 55 | 09:56 | " | 4.1 ft. " " |

TIDE (III) Predicted

diurnal

| | RATIO OF RANGES | MEAN RANGE | MINIMUM RANGE |
|-------------------------------------|-----------------|------------|--------------------------|
| REFERENCE STATION: SITKA, ALASKA | | 7.7 | 9.9 |
| SUBORDINATE STATION: Port Beauclerc | | 10.0 | 12.2 |
| SUBORDINATE STATION: | | | |

Atlantic Marine Center

WORKING MODEL REVIEW BY (IV):

C. H. Bishop

DATE:

Jan. 1972

PROOF EDIT BY (IV):

DATE:

NUMBER OF TRIANGULATION STATIONS SEARCHED FOR (II):

9

RECOVERED: 8

IDENTIFIED:

4

NUMBER OF BM(S) SEARCHED FOR (II):

None

RECOVERED:

IDENTIFIED

NUMBER OF RECOVERABLE PHOTO STATIONS ESTABLISHED (III): None

NUMBER OF TEMPORARY PHOTO HYDRO STATIONS ESTABLISHED (III): None

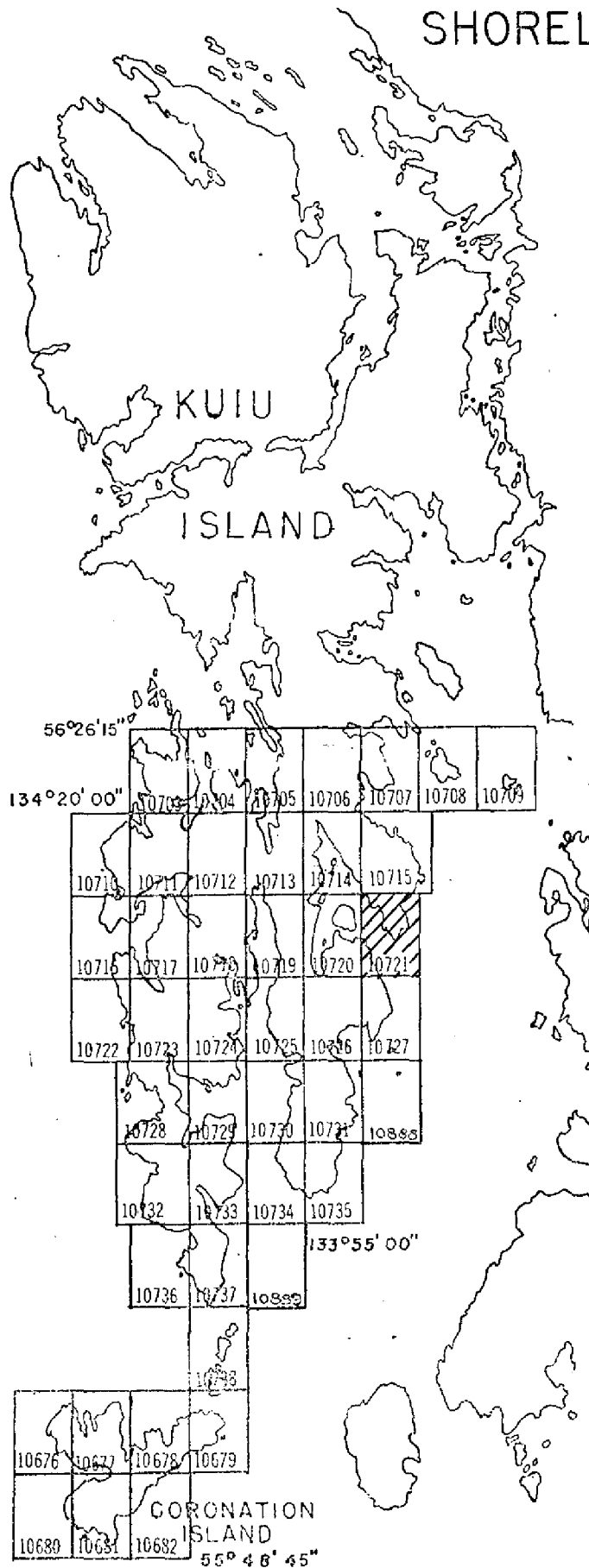
REMARKS:

T-10721

| COMPILATION RECORD | COMPLETION DATE | REMARKS |
|--------------------|-----------------|------------|
| Copy for blueline | Feb. 1962 | Superseded |
| Field edit applied | Sept. 1962 | |
| Final review | Jan. 1972 | |
| | | |
| | | |

SHORELINE MAPPING PROJECT

Ph-5702

CORONATION and
KUIU ISLANDS,
ALASKAOfficial Mileage For Cost Accounts

| Sheet No. | Area Sq. Mi. | Lin. Mi. Shoreline |
|-----------|--------------|--------------------|
| 10676 | 2 | 3.4 |
| 10677 | 8 | 11.1 |
| 10678 | 6 | 7.7 |
| 10679 | 3 | 6.0 |
| 10680 | 1 | 1.5 |
| 10681 | 8 | 7.7 |
| 10682 | 2 | 2.6 |
| 10703 | 10 | 11.5 |
| 10704 | 6 | 12.8 |
| 10705 | 9 | 11.9 |
| 10706 | 14 | 2.6 |
| 10707 | 4 | 7.7 |
| 10708 | 2 | 9.4 |
| 10709 | 1 | 3.0 |
| 10710 | 5 | 6.8 |
| 10711 | 11 | 7.7 |
| 10712 | 14 | 9.9 |
| 10713 | 12 | 9.4 |
| 10714 | 5 | 8.5 |
| 10715 | 11 | 6.8 |
| 10716 | 4 | 5.1 |
| 10717 | 9 | 11.1 |
| 10718 | 13 | 6.0 |
| 10719 | 8 | 11.1 |
| 10720 | 9 | 8.5 |
| 10721 | 1 | 8.5 |
| 10722 | 2 | 1.3 |
| 10723 | 14 | 3.4 |
| 10724 | 11 | 10.2 |
| 10725 | 8 | 7.7 |
| 10726 | 11 | 1.3 |
| 10727 | 3 | 4.5 |
| 10728 | 10 | 11.5 |
| 10729 | 6 | 11.9 |
| 10730 | 5 | 1.3 |
| 10731 | 10 | 8.5 |
| 10732 | 10 | 8.5 |
| 10733 | 9 | 7.7 |
| 10734 | 3 | 3.4 |
| 10735 | 4 | 4.7 |
| 10736 | 1 | 1.5 |
| 10737 | 6 | 8.5 |
| 10738 | 1 | 6.8 |
| TOTAL | 295 | 298.8 |

SUMMARY

DESCRIPTIVE REPORT T-10721

This shoreline manuscript, scale 1:10,000, is one of 45 maps that were planned for Project PH-5702, which includes the south half of Kuiu Island, Spanish Islands, and Coronation Island, in Southeast Alaska. Only 33 maps were compiled. T-10721 includes Beauclerc Island at the entrance to Port Beauclerc.

Compilation was by radial plot. A 1:20,000 scale plot using 9-lens photography of 1958, was constructed to verify identified control and to establish pass points to control a 1:10,000 plot using 1:10,000 scale ratio prints of single-lens photographs taken in September 1955. The 1:10,000 plot was constructed directly on the map manuscripts. In general, control was adequate for laying the plots. See Photogrammetric Plot Report, scale 1:20,000, dated 9 June 1960 and Photogrammetric Plot Report, scale 1:10,000, dated 10 June 1960.

Field edit was performed in 1962. No field edit report was available at the time of final review. Classification of this map is ADVANCE.

Final review was done at the Atlantic Marine Center in January 1972.

The compilation manuscript was a vinylite sheet 3 minutes 45 seconds in latitude by 5 minutes in longitude.

A cronaflex copy of the final reviewed manuscript and a negative have been forwarded for record and registry.

7

FIELD INSPECTION REPORT
POINT ST. ALBANS TO ALVIN BAY
1958 FIELD SEASON

Manuscript No. T-10706, T-10707, T-10714
T-10715, T-10720, T-10721
T-10726, T-10727, T-10730
T-10731, T-10734, T-10735

2. AREAL FIELD INSPECTION

The area covered by this report includes the eastern side of Kuiu Island from Alvin Bay south to and including Point St. Albans.

The field inspection was confined to the areas in the immediate vicinity of the control stations.

The shoreline in this area is very irregular with many small bights and off-lying rocks. The foreshore consists generally of rock and boulder strewn beaches with rock ledges occurring on most points. The area is covered with a dense growth of conifers which usually extend inland from the HWL.

The rock outcroppings in this area are in general metamorphic limestone with igneous intrusions.

Densities and tones were not inspected on the land area. In the water areas it was confined to the immediate area of the control stations.

Photographic coverage consists of single lens aerial photographs at a scale of 1:25,000. The contact prints were furnished for field use. The definition on the prints was generally good, however, identification was difficult in some areas due to shadows caused by trees and terrain. The compiler may have difficulty in interpreting the MHWL in some areas due to overhanging trees and shadows.

3. HORIZONTAL CONTROL

All horizontal control stations for this area as indicated on the project diagram were searched for with the exception of BEULEK 1938 and UPPER 1938. BEULEK and UPPER are on mountain peaks and were impracticable to recover. Recovery of triangulation stations ALL 1927 and CLEW 1927 was not attempted since they fell north of the project limits and were not needed. Recovery notes were submitted on form 526 for all stations that were searched for.

It is recommended that three triangulation stations be considered lost:

BEG 1929
END 1929
CLERC 1915

No description was available for CLERC 1915 although a search was made in the immediate vicinity of its geographic position.

The published geographic position (unchecked) for station SEC 1929 is in error. A new position will be determined for this station when work resumes in the area.

All stations were positively identified with the exception of GENE 1937. It's identification was classified as doubtful on the Control Identification Card.

After the receipt of the Director's letters dated 6-6-58 and 6-25-58; 711-lmh; additional work was accomplished in the Priority A area, except for Tebenkof Bay. All stations were positively identified by the selection of two substitute points, where possible.

Sixteen control stations in priority area A on the west side of Kuiu Island, southeast end of Tebenkof Bay, were searched for of which 9 were positively identified on photographs. Control identification cards for these nine stations and all photos on the diagonal flights are included as instructed in the note found on the project diagram.

4. VERTICAL CONTROL

Inapplicable

5. CONTOURS AND DRAINAGE

Contours - inapplicable

There are no important streams in the area inspected. There is some drainage with definite channels defined on the photographs.

6. WOODLAND COVER

The area is heavily wooded being covered with conifers, mostly spruce with some cedar. The trees extend inland from the HML.

7. SHORELINE AND ALONGSHORE FEATURES

The shoreline and alongshore features were inspected only in the area of the control stations and then only where skiff landings were made. No other inspection of the area was requested. The area will be field edited at the time of hydrography.

The only cultural features in the area are two trappers cabins used during the trapping season. One is on the eastern shore of Reid Bay and the other on the eastern shore of Port Beauclerc. Neither is identifiable on any of the photographs. The remains of an aban-

doned camery also exist on the west shore of Port Beauclerc, northwest of Edwards Island. There are no structures remaining.

8. OFFSHORE FEATURES

The offshore features were inspected only incident to the identification of the control stations. The area will be field edited at the time of hydrography.

9. LANDMARKS AND AIDS

There is one fixed aid to navigation in the area. It is:

Beauclerc Island Light

The several floating aids to navigation in the area will be located at the time of hydrography.

10. BOUNDARIES, ETC.

Inapplicable

11. OTHER CONTROL

Nons

12. OTHER INTERIOR FEATURES

Inapplicable

13. GEOGRAPHIC NAMES

Will be covered in a special report.

14. SPECIAL REPORT AND DATA

| <u>Title</u> | <u>Disposition</u> |
|-------------------------------|---------------------------------------|
| 1. Photogrammetric Field Data | Washington Office with this report |

15 - 20 NOT USED

Herman H. Druebert
Herman H. Druebert
LTJG, C&GS

Approved and Forwarded

J. E. Waugh
J. E. Waugh
CDR, C&GS
C. O., HODGSON

PHOTOGRAMMETRIC PLOT REPORT

Project Ph-5702

Scale 1:20,000

Surveys T-10706 thru T-10709

T-10713 " T-10715

T-10718 " T-10721

T-10724 " T-10731

T-10733 " T-10735

T-10737

T-10888 and T-10889

PURPOSE:

This radial plot was made using 1:20,000 nine-lens photographs. These wide coverage photographs were used to verify identified control and establish positions for pass points for use in controlling photogrammetric plot using 1:10,000 scale single-lens photographs. See item No. 6 (Methods) of instructions dated 11 September 1959.

21. AREA COVERED

This radial plot covers the area of the surveys listed above. They are shoreline surveys along the west shore of Sumner Strait, embracing the areas known as Alvin Bay, Reid Bay, Port Beauclerc, Louise Cove, Bear Harbor, Kell Bay, Affleck Canal and Port McArthur.

22. METHOD - RADIAL PLOT

Base sheets with two thousand (2,000) meter grids in black ink, were furnished by the Washington Office.

The Coordinatograph was used to plot the control stations and substitute stations.

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

Photographs:

Thirty-six (36) nine-lens, unmounted photographs at a scale of 1:20,000 were used in this plot, numbered as follows:

57480 through 57485

57499 " 57506

57517 " 57527

57532 " 57542

Templets:

Vinylite templets were made using the master templet to correct for film and paper distortion, and chamber displacement.

Closure and Adjustment to Control:

This plot was laid in two parts, southern half and a northern half with the dividing line the area between surveys T-10724 through T-10727 common with both plots. Construction started with photograph 57532 and extended north to 57538. The plot was then extended eastward to the project limits, incorporating the flights 57522 through 57527 and 57499 through 57502.

The second part was an extension of the first part northward to the project limits.

Transfer of Points:

The pass points and photograph centers were pricked on the top templet and then drilled down through the templets and base sheets. Later the coordinatograph was used to scale the grid position of the pass points for transfer to the 1:10,000 map manuscripts.

23. ADEQUACY OF CONTROL

The density and distribution of control was adequate for all surveys in this radial plot.

See item 23 in the single-lens plot report, dated 10 June 1960, covering the same surveys as this plot.

24. SUPPLEMENTAL DATA

None.

25. PHOTOGRAPHY

The definition of the photographs was good. Due to the difference in time, tide and tone quality between the nine-lens and single lens photographs great difficulty was encountered in trying to prick the identified control on the nine-lens photographs. Great care had to be taken in trying to find a common pass point near the shoreline, one that would leave no doubt that it was the same as the point on the single-lens photographs.

Respectfully submitted
9 June 1960

Leroy A. Senasack

Leroy A. Senasack
(Carto. (Photo.))

- 1 AGO, 1954
- 2 CON, 1927
- 3 HOW, 1954
- 4 GAL, 1954
- 5 DELHI, 1915
- 6 BIB, 1954
- 7 REEF 2, 1915
- 8 FOX, 1929
- 9 NER, 1929
- 10 THAT, 1927
- 11 BAY, 1929
- 12 FAG, 1929
- 13 RUT, 1929
- 14 PAR, 1929
- 15 DAL, 1929
- 16 UP, 1929
- *17 TWIN, 1926
- *18 BARE, 1926
- *19 ARM, 1926
- *20 MID, 1926
- *21 ROCK, 1926
- *22 WON, 1925
- *23 GO 2, 1958
- *24 TRI, 1926
- 25 LAST, 1926
- 26 ROSE, 1937
- 27 POM, 1929
- 28 TURN, 1929
- 29 BOULDER, 1915
- 30 TRUS, 1937
- 31 EDNA, 1937
- 32 WEAK, 1937
- 33 FLOR, 1937
- 34 GOOD, 1937
- 35 PEGG, 1937
- 36 GENE, 1937
- 37 CORK, 1937
- 38 WESS, 1937
- 39 MON, 1929
- 40 SUN, 1929
- 41 BEAUCLERC 2 (LIGHT), 1922
- 42 BEAR, 1936
- 43 BITE, 1936
- 44 ALECK, 1936
- 45 BUDD, 1937

* On nine-lens photographs only.

46 HOME, 1937
47 PEN, 1936
48 ENTER, 1936
49 HIND, 1936
50 ADEN, 1937

51 SOW, 1929
52 PIN, 1915
53 RUTH, 1937
54 VICK, 1937
55 HOPE, 1936

56 BUSH, 1936
57 DUB, 1936
58 MILT, 1937
59 MACK, 1937
60 HOLM, 1937

61 CLEVE, 1886-1922
62 ARTHUR, 1936
63 LEMON, 1936
64 NORTH, 1936
65 LEMON POINT ROCK LIGHT, 1958

66 STAR, 1936
67 AFFLECK, 1936
68 JUNE, 1937
69 BETS, 1937
70 ALBANS, 1886

71 MAC, 1899
72 MAC, 1936
73 SHORE, 1923
74 MIDDY, 1936
75 ZAG, 1923

76 CAPEDECISION LIGHT, 1936
77 SPANISH ISLAND LIGHT, 1936
78 WAY, 1936

PHOTOGRAMMETRIC PLOT REPORT

Project Ph-5702

Scale 1:10,000

Surveys Nos. T-10706 thru T-10709

T-10713 " T-10715

T-10718 " T-10721

T-10724 " T-10731

T-10733 " T-10735

T-10737

T-10888 and T-10889

21. AREA COVERED

This radial plot covers the area of the surveys listed above. They are shoreline surveys along the west shore of Sumner Strait, embracing the areas known as Alvin Bay, Reid Bay, Port Beauclerc, Louise Cove, Bear Harbor, Kell Bay, Affleck Canal and Port McArthur.

22. METHOD-RADIAL PLOT

Map Manuscripts:

Vinylite sheets with polyconic projections in black, U. T. M. Zone 8 grid in red, at a scale of 1:10,000 were furnished by the Washington Office.

All triangulation stations, substitute stations, and common pass point positions taken from the 1:20,000 radial plot were plotted using the Coordinatograph.

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

Photographs:

One hundred twenty-six (126) single-lens photographs, ratioed to a scale of 1:10,000 were used in this plot and are numbered as follows:

55-W-9377 thru 9386

55-W-9612 and 9613

9400A " 9412

9667 thru 9674

9443 " 9457

9678 " 9680

9463 " 9478

9687 " 9690

9550 " 9570

9696 " 9701

9576 " 9593

9704

9641 " 9649

Templets:

Kodapak or vinylite templets were made of each of the single-lens photographs but no adjustment was made for paper distortion.

Closure and Adjustment to Control:

The common pass points were transferred from the 1:20,000 scale base sheets by scaling their grid position with the Coordinatograph and then plotting them on the 1:10,000 scale map manuscripts with the same instrument.

The radial plot was constructed directly on the map manuscripts.

This plot was laid in two parts, with the surveys Nos. T-10724 through T-10727 common in both plots. The first part was started at Cape Decision (Survey T-10738) and extended northward up Affleck Canal. After this was done the plot was extended eastward to the project limits. Due to some trouble with the field identification for control station BUSH, 1936 it may be advisable to reidentify this station. In the area between DUB, 1936 and ENTER, 1936 there is a flight of photographs the centers of which fall in the water. Since there is no field identified control, and only one control station office identified, this part of the plot is also considered fair.

The second part of the plot was extended northward but would not tie into control station ROSE, 1937. The two flights which go parallel with Port Beauclerc, taken in the morning with most of the pass points away from the tree shadows, are considered better. These two flights were extended from the mouth of Port Beauclerc to the head and tied into Sub Point A for ROSE, 1937. (See item 23) After this was done, the plot was extended northward to the project limits with no difficulty.

The definition on the photographs is very poor around BEAUCLERC LIGHT, 1915. It is a white object on what appeared to be white ledge and for this reason it is recommended that this Light, or ISLE, 1929 be reidentified by sub point method. The point on the office photographs is the same as the field identified point.

Transfer of Points:

The positions of all photograph centers and pass points were pricked on the top templates and then drilled through the templates and map manuscripts.

23. ADEQUACY OF CONTROL

In general, the density and distribution of control was adequate for this project. However, there are several gaps, some being where the field man was verifying the existence of the stations but did not identify them.

The following control stations could not be held in the plot:

BUSH, 1936 - Nothing seems to agree at this station. The distance and direction of the plotted position does not agree with field identification on the contact print or the Form 152. The location of this station makes it a critical one for the construction of a good rigid radial plot. A note was attached to a field photograph and the hydrographer was requested to reidentify this station.

HOME, 1937 - The radially plotted position for this direct identification for this station falls approximately 1.1 mm to the NW of the plotted position. This point was reidentified in the office to agree with the description.

RUT, 1929 - The radially plotted position for the substitute station falls approximately 0.4 mm to the NE of the plotted position. Since there are numerous other field or office identified control stations in the vicinity, it is not essential for a rigid radial plot.

FAG, 1929 - The radially plotted position for the direct identification for this station falls approximately 4.4 mm to the SE of the plotted position. The nine-lens photographs verified the fact that the field man pricked some floating debris instead of the rock. This station was office identified and held in plot.

THAT, 1927 - The radially plotted position for this substitute station falls approximately 0.8 mm to the WSW of the plotted position. Both the station and substitute station was misidentified. The station was office identified and held in the plot.

FOX, 1929 - The radially plotted position for this substitute station falls approximately 1.0 mm to the east of the plotted position. There is another detached rock west of the identified point approximately the same place as the plotted position. It is believed that this station is another case of misidentification.

BIB, 1954 - The radially plotted position for substitute station "A" falls approximately 3.9 mm to the east of the plotted position. This is a case of misidentification.

The radially plotted position for substitute station "B" falls approximately 1.2 mm to the east of the plotted position. The field distance to this station is in error.

DEIHI, 1915 - The radially plotted position for substitute station "A" falls approximately 2.1 mm to the NW of the plotted position. The field distance for this station is in error.

The radially plotted position for substitute station "B" falls approximately 2.5 mm SSW of the plotted position. This station was misidentified.

With the aid of the description, the triangulation station was office identified and held in the plot.

GAL, 1954 - The radially plotted position for substitute station "A" falls approximately 7.3 mm to the south of the plotted position. The field distance to this station is in error.

The radially plotted position for substitute station "B" falls approximately 8.0 mm SSE of the plotted position. This is another case of error made in the distance to this station.

The triangulation station was office identified and held in the plot.

CON, 1927 - The radially plotted position for this substitute station falls approximately 0.9 mm to the NNE of the plotted position. This station appears to be misidentified.

The triangulation was office identified and held in the plot.

24. SUPPLEMENTAL DATA

None.

25. PHOTOGRAPHY

The majority of these photographs were taken late in the afternoon of one day while the rest were taken early in the morning of the following day. Due to the time the photographs were taken, large sections of the shoreline appears in deep shadow. These shadow areas created problems in trying to find common pass points. In many cases, due to deep shadow, good points on the nine-lens photographs were obscured on the single lens photographs.

In the area around Boulder Point, one photograph, 55-W-9700, had a very light washed-out area right in the vicinity of identified control station BOULDER, 1915. This created several problems in trying to use photographs 55-W-9612 and 9613. These photographs were taken the previous day; and time, tide, and shadow were different.

26. CONTROL IDENTIFICATION

Considerable difficulty was encountered while pricking field identified control throughout this project. It was noted that the distances between field identified image points of substitute stations disagreed with distances between computed positions. To aid in selecting the correct image points, a piece of clear vinylite to which the positions of stations and substitute stations were transferred was placed over one photograph when a pair was studied stereoscopically. Then, with the aid of sketch and description on identification card and with the original station description, the correct images of the substitute points were determined. The identification of many stations was changed from field identification where discrepancies were found.

Numerous stations in this project had distances to substitute points given in meters (by stadia). Most of these distances appeared to be in error, but the reason could not be determined. There was no factor that could be applied to correct the errors. On Strait Island, only two of the six identified stations could be held. The others appeared to be in error due to trouble with stadia distances.

One good example of identification difficulties was at BOULDER, 1915. Substitute Point "A" was used because it was the only point which seemed to agree with distances, sketch, and photograph. At Sub. Pt. "B", the position seems to check the easterly point of large rock - instead of the westerly point, as described. At Sub. Pt. "C" the position falls in the water indicating a distance error, probably due to stadia error. The approximate location of the station could be determined from the description for use in selecting the correctly identified sub. pt. Due to centers of several photographs falling water areas, a rigid plot to eliminate the errors in identification could not be obtained and Sub. Pt. "A" was used to control the plot.

Another example of control misidentification was at POM, 1929. The rock selected was actually in deep shadow and not visible so a wrong rock was identified on photograph 55-W-9589 which was taken in late afternoon. Photograph 55-W-9700 taken in morning of next day also covers the area and, if used, no error in identification would have been made.

- 5 -

Another example is at ROSE, 1937. The distance between two substitute points is short. Sub. Pt. "A" is a boulder or beach at edge of shadow. Sub. Pt. "B" is a prominent, high outcrop. Both appear to be good positive points. The error may be in either Sub. Pt. "A", which could be in shadow or in position for Sub. Pt. "B" which is a long distance from the station and a small error in azimuth could account for the error. Sub. Pt. "A" was held in the radial plot, but the identification should be verified since it is the last station in the plot at the head of Port Beauclerc.

27. POSITION ERROR

The published position for triangulation station SEC, 1929 places it in the water, in Port Beauclerc, off Edwards Island. The description of the station on page 17 of cahier Alaska No. 41, places the station "about 2 miles south of Boulder Point on the west shore of Sumner Strait. The approximate position for this station should be $56^{\circ} 17.4$ N and $133^{\circ} 51.1$ W. Also see Recovery Note, Form 526.

The published position for triangulation station PEAK 16, 1922 places it in forty-five (45) fathoms of water, in Chatham Strait, east of Cape Decision.

Respectfully submitted
10 June 1960

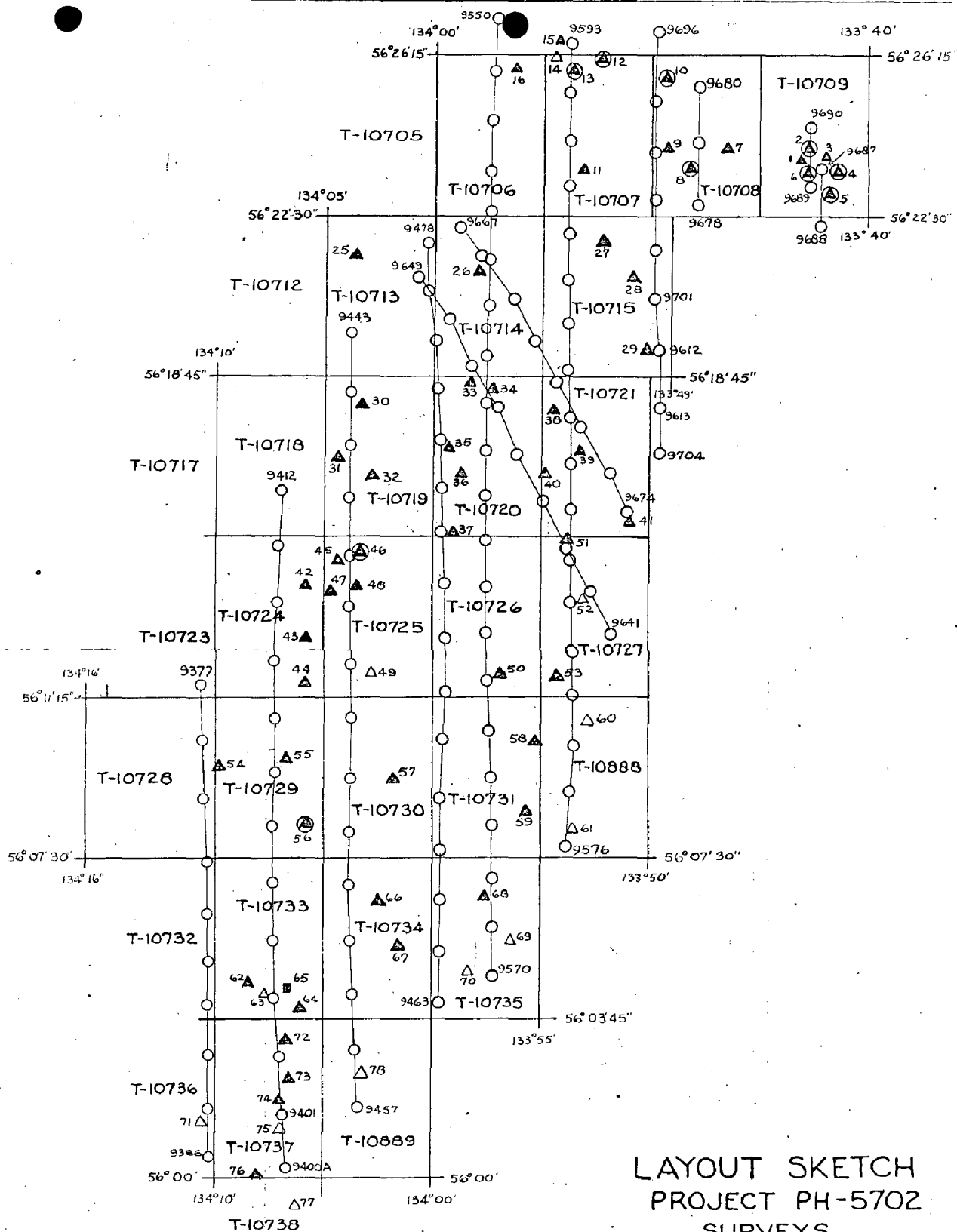
Leroy A. Senasack

Leroy A. Senasack
Carto. (Photo.)

LIST OF NUMBERED CONTROL STATIONS
PH - 5702

- | | | |
|------------------|----------------------------------|-------------------------------------|
| 1. AGO, 1954 | 27. POM, 1929 | 53. RUTH, 1937 |
| 2. CON, 1927 | 28. TURN, 1929 | 54. VICK, 1937 |
| 3. HOW, 1954 | 29. BOULDER, 1915 | 55. HOPE, 1936 |
| 4. GAL, 1954 | 30. TRUS, 1937 | 56. BUSH, 1936 |
| 5. DELHI, 1915 | 31. EDNA, 1937 | 57. DUB, 1936 |
| 6. BIB, 1954 | 32. WEAK, 1937 | 58. MILT, 1937 |
| 7. REEF 2, 1915 | 33. FLOR, 1937 | 59. MACK, 1937 |
| 8. FOX, 1929 | 34. GOOD, 1937 | 60. HOLM, 1937 |
| 9. NER, 1929 | 35. PEGG, 1937 | 61. CLEVE, 1886-1922 |
| 10. THAT, 1927 | 36. GENE, 1937 | 62. ARTHUR, 1936 |
| 11. BAY, 1929 | 37. CORK, 1937 | 63. LEMON, 1936 |
| 12. FAG, 1929 | 38. WESS, 1937 | 64. NORTH, 1936 |
| 13. RUT, 1929 | 39. MON, 1929 | 65. LEMON POINT ROCK LIGHT, 1958 |
| 14. PAR, 1929 | 40. SUN, 1929 | 66. STAR, 1936 |
| 15. DAL, 1929 | 41. BEAUCLERC 2 (LIGHT), 1922 | 67. AFFLECK, 1936 |
| 16. UP, 1929 | 42. BEAR, 1936 | 68. JUNE, 1937 |
| * 17. TWIN, 1926 | 43. BITE, 1936 | 69. BETS, 1937 |
| * 18. BARE, 1926 | 44. ALECK, 1936 | 70. ALBANS, 1886 |
| * 19. ARM, 1926 | 45. BUDD, 1937 | 71. MAC, 1899 |
| * 20. MID, 1926 | 46. HOME, 1937 | 72. MAC, 1936 |
| * 21. ROCK, 1926 | 47. PEN, 1936 | 73. SHORE, 1923 |
| * 22. WON, 1925 | 48. ENTER, 1936 | 74. MIDDY, 1936 |
| * 23. GO 2, 1958 | 49. HIND, 1936 | 75. ZAG, 1923 |
| * 24. TRI, 1926 | 50. ADEN, 1937 | 76. CAPE DECISION LIGHT, 1936 |
| 25. LAST, 1926 | 51. SOW, 1929 | 77. SPANISH ISLAND LIGHT, 1936 |
| 26. ROSE, 1937 | 52. PIN, 1915 | 78. WAY, 1936 |

* On nine lens photo's only



- Single lens office photographs
- △ Control station identified
- ⊗ Control station not held in plot
- △ Control station office identified
- Recoverable topo with field position

LAYOUT SKETCH PROJECT PH-5702 SURVEYS

T-10706 THRU T-10709
T-10713 THRU T-10715
T-10718 THRU T-10721
T-10724 THRU T-10731
T-10733 THRU T-10735
T-10737
T-10888 AND T-10889

U.S. DEPARTMENT OF COMMERCE
DESCRIPTIVE REPORTCOAST AND GEODETIC SURVEY
CONTROL RECORD

MAP T. 10721 PROJECT NO. PH-5702 SCALE OF MAP 1:10,000 SCALE FACTOR

| STATION | SOURCE OF INFORMATION (INDEX) | DATUM | LATITUDE OR ψ -COORDINATE LONGITUDE OR λ -COORDINATE | DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS FORWARD (BACK) | DATUM CORRECTION | N.A. 1927-DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK) | FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK) |
|------------------------------|-------------------------------|--------------|--|---|---------------------|--|--|
| BEAULIERC 2 (LIGHT), 1922 | Page 9 | N.A. 1927 | 6,235,153.69 571,079.63 | | | | |
| MON, 1929 | Page 26 | " | 6,238,059.20 568,849.90 | | | | |
| SUB PT. "A" MON, 1929 | Comp. | " | 6,238,041.41 568,860.30 | | | | |
| SUB PT. "B" MON, 1929 | Comp. | " | 6,238,052.39 568,862.92 | | | | |
| WESS, 1937 | Page 26 | " | 6,240,121.77 567,547.41 | | | | |
| SUB PT. "A" WESS, 1937 | Comp. | " | 6,240,119.48 567,546.83 | | | | |
| SUB PT. "B" WESS, 1937 | Comp. | " | 6,240,191.28 567,520.07 | | | | |
| SUN, 1929 | Page 10 | " | 6,236,910.00 567,294.80 | | | | |
| ISLE, 1929 | Page 9 | " | 6,235,615.53 570,947.61 | | | | |
| NOR, 1929 | Page 10 | " | 6,237,083.57 569,658.21 | | | | |
| BEAULIERC LIGHT | Page 9 | " | 6,235,153.13 571,081.29 | | | | |
| ECCENTRIC, 1915 | | | | | | | 2 |
| | | | | | | | 2 |

1 FT. = 3048006 METER
COMPUTED BY: M. CUNNINGHAM

DATE 10/9/59

CHECKED BY: B. WILSON

DATE 11/3/59

COMM. DC-57643

COMPILATION REPORT

T-10720 and T-10721

31. DELINEATION:

These manuscripts were delineated by the graphic method.

The 1962 Field Edit Report was not furnished to the compilation office.

32. CONTROL:

The compiler found the horizontal control adequate. However, some difficulties were encountered in constructing the radial plot. See Photogrammetric Plot Report.

33. SUPPLEMENTAL DATA:

None

34. CONTOURS AND DRAINAGE:

Contours: Not applicable

Drainage: No comment

35. SHORELINE AND ALONGSHORE DETAILS:

There was no shoreline field inspection except in the immediate vicinity of control stations; all delineation was based on office interpretation. Interpretation of the mean high water line was difficult in some areas due to overhanging trees and shadows. Where this occurred the shoreline was delineated with a dashed line.

Shoreline and alongshore details were corrected or verified by field edit during the 1962 season. One exception to this was a short section of dashed shoreline in the southwest corner of T-10721.

The approximate mean low water line, offshore limits of ledge, foul areas and rocks awash were delineated by office interpretation of the 1:20,000 scale nine-lens photographs which were enlarged to manuscript scale by use of the vertical projector. Field edit also corrected or verified these features.

36. OFFSHORE DETAILS:

No comment.

37. LANDMARKS AND AIDS:

T-10720: None

T-10721: Form 567 for Beauclerc Island Light is submitted with this report.

38. CONTROL FOR FUTURE SURVEYS:

None

39. JUNCTIONS:

Junction has been made and is in agreement between the subject surveys. In addition, junctions have been made and are in agreement between this unit and the following: T-10714 and T-10715 to the north, T-10719 to the west, and T-10726 and T-10727 to the south. There is an all water area to the east.

40. HORIZONTAL AND VERTICAL ACCURACY:

No comment.

41 through 45: Not used

46. COMPARISON WITH EXISTING MAPS:

U. S. G. S. Petersburg, Alaska-Canada Reconnaissance Topographic Series, Scale 1:250,000, published in 1952.

47. COMPARISON WITH NAUTICAL CHARTS:

Chart 8201, Scale 1:217,828, 10th edition, dated July 17, 1961.

Items to be applied to nautical charts immediately:

None

Items to be carried forward:

None

Respectfully submitted:

R. Glaser
Carto (Photo)
9 October 1962

October 26, 1971

GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-5702 (Alaska)

T-10721

Beauclerc Island

Kuiu Island

Port Beauclerc

Sumner Strait

Approved by:

A. Joseph Wraight
A. Joseph Wraight
Chief Geographer

Prepared by:

Frank W. Pickett
Frank W. Pickett
Cartographic Technician

NOTES FOR THE HYDROGRAPHER

Sumner Strait

(Sumner Island and Alvin Bay to Port Beauclerc)

Surveys T-10706 through T-10709,

T-10714, T-10715,

T-10720 and T-10721

These surveys were delineated by office interpretation of the photographs. In Sumner Strait, photographs were taken at a low stage of tide and MHW line should be carefully verified. In Port Beauclerc, photography was at both high and low stages of tide on two different days. However, the steep slopes caused deep shadows over much of the shoreline. Nine-lens photographs, scale 1:20,000, taken at stage of tide just above MLLW, were used to supplement single lens photography in interpretation of ledge areas, approximate low water line and rocks awash, using a reflecting projector to correct for scale difference.

A dashed line was used to indicate areas of kelp, and those which are foul or possibly foul.

In areas of deep shadow, the MHW line was shown with a dashed line (approximate MHW) and should be verified, particularly south shores of Alvin Bay and Port Beauclerc.

Verify, or correct, extent of ledges and character of foreshore (shown as gravel, ledge, boulders, etc.).

Indicate the extent of any bluffs of importance for charting.

Inspect and give elevations of offshore rocks and rocks whose elevations are of importance for navigation.

Investigate character of two objects marked "ruins" at Lat. $56^{\circ} 18.8'$, Long. $133^{\circ} 59.3'$ (T-10714). These objects show well on photographs 55-5-9475 and 9647.

Verify existence of what appears to be a pier in cove at Lat. $56^{\circ} 18.2'$, Long. $133^{\circ} 54.0'$ (T-10721).

There was considerable difficulty with control identification on Strait Island (T-10709). Field positions of substitute points were obviously in error at GAL, 1954 and BIB, 1954; probably due to use of stadia for distances. Only two of six stations could be held as field identified and located, requiring much office study and interpretation to get a satisfactory radial plot. The accuracy of the plot should be checked, particularly at the two stations mentioned. Also verify the existence of Strait Island Lighthouse (abandoned).

Definition of photography was poor at BEAUCLERC LIGHT, 1915. Verify the accuracy of radial plot at the light or at ISLE, 1929.

NONFLOATING AIDS ORIENTED NETWORKS FOR CHARTS

TO BE CHARTED
TO BE REMOVED
TO BE DELIVERED

Baltimore, Maryland October 5, 1962

I recommend that the following objects *(which have (have not) been inspected from seaward to determine their value as landmarks be charted on (deleted from) the charts indicated.*

The positions given have been checked after listing by R. Glaser

J. Steinberg

Acting *Chief of Party.*

[illegible]

This form shall be prepared in accordance with Hydrographic Manual, Publication 20.2, Sec. 1-55, 2-39, 6-36, 7-18 to 22 inclusive, and Fig. 79. Positions of charted landmarks and *nonfloating aids* to navigation, if redetermined, shall be reported on this form. Revisions shall show both the old and new positions. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

TABULATE SECONDS AND METERS

REVIEW REPORT T-10721

SHORELINE

January 17, 1972

61. GENERAL STATEMENT:

See Summary on page 6 of this Descriptive Report.

An ozalid comparison print, page 29, showing differences noted in Items 63 and 64, is bound with the original of this report.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS:

There were no registered topographic surveys available for comparison at the time of final review.

63. COMPARISON WITH MAPS OF OTHER AGENCIES:

A visual comparison was made with U.S.G.S. Quadrangle PETERSBURG (B-6), ALASKA, scale 1:63,360, dated 1948. Only one significant difference was noted -- a rock awash at lat. $56^{\circ}18.1'$, long. $133^{\circ}51.6'$. A kelp patch is visible on Photo 55 W 9703. No rock was located at this position by the hydrographer on Survey H-8653.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:

A comparison was made with a copy of the smooth sheet for Survey H-8653, scale 1:10,000, dated 1961. No differences were noted between this survey and T-10721.

T-10721 was also compared with Survey H-8654, scale 1:10,000, dated 1962. Significant differences are noted in purple on the comparison print.

65. COMPARISON WITH NAUTICAL CHARTS:

A visual comparison was made with Chart 8201, scale 1:217,828, 16th edition, dated 7 November 1970. No significant differences were noted between this chart and T-10721.

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS:

It is believed that this survey is sufficiently accurate for photo-hydro support and nautical chart construction purposes.

Please see Photogrammetric Plot Report, Scale 1:20,000, dated June 9, 1960 and Photogrammetric Plot Report, Scale 1:10,000, dated June 10, 1960, neither of which state whether the accuracy of these radial plots meets the National Standards of Map Accuracy.

Reviewed by:

Charles H. Bishop

Charles H. Bishop
Cartographer
17 January 1972

Approved for forwarding:

Melvin J. Umbach

Melvin J. Umbach, CDR, NOAA
Chief, Photogrammetry Division, AMC

Approved:

Alfred C. Holmes

Alfred C. Holmes, RADM, NOAA
Director, Atlantic Marine Center

Approved:

Charles L. Lamm

Chief, Photogrammetric Branch

Jack E. Luth

Chief, Coastal Mapping Division

T

52'

133° 51'

29

G & Bld

kelp

56° 18'

J I U
L A N D

T

kelp

COMPARISON PRINT

Brown = U.S.G.S.

Purple = H-8653

T

T

T

T

kelp

*

56° 17'

133° 51'

52'

*

RK