10709

ORIGINAL

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-10709

LOCALITY

State ALASKA

General locality KUIU ISLAND - SUMNER ISLAND

Locality STRAIT ISLAND

1955-65

CHIEF OF PARTY
J. E. Waugh, Chief of Field Party
M. J. Tonkel, Baltimore District Officer
Alfred C. Holmes, Director, A. M. C.

LIBRARY & ARCHIVES

DATE

10709

FORM C&GS-181a
(12-61)

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT - DATA RECORD

1

T- 10706 thru T- 10709

PROJECT NO. (II):
(Ph-5702) 21016

FIELD OFFICE (II):	CHIEF OF PARTY
Ship HODGSON	J.E.Waugh
PHOTOGRAMMETRIC OFFICE (III):	OFFICER-IN-CHARGE
Baltimore, Maryland	M.J.Tonkel

INSTRUCTIONS DATED (II) (III):
10/29/57 Project Diagram
11/27/57 22/MEK, S-2-Ho
11/20/57
9/11/59

METHOD OF COMPILATION (III):
Graphic

MANUSCRIPT SCALE (III):	STEREOSCOPIC PLOTTING INSTRUMENT SCALE (III):
1:10,000	
DATE RECEIVED IN WASHINGTON OFFICE (IV):	DATE REPORTED TO NAUTICAL CHART BRANCH (IV):

APPLIED TO CHART NO.	DATE:	DATE REGISTERED (IV):

GEOGRAPHIC DATUM (III):	VERTICAL DATUM (III): M.H.W.
N.A. 1927	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 (II):
REEF 2, 1915-1927

LAT.:	LONG.:	
56° 24' 08.825"	133° 46' 36.143"	☒ ADJUSTED ☐ UNADJUSTED

PLANE COORDINATES (IV):	STATE	ZONE
Y=6,251,330.83 X=575,499.98	Alaska, 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.

USCOMM-DC 16276-P61

FORM C&GS-981b
(3-66)

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

DESCRIPTIVE REPORT - DATA RECORD

2

FIELD INSPECTION BY (II): Herman H. Druebert	DATE: 1958
MEAN HIGH WATER LOCATION (III) (STATE DATE AND METHOD OF LOCATION): 21 September 1955, graphic	
PROJECTION AND GRIDS RULED BY (IV): P. J. Dempsey	DATE 10-23-59
PROJECTION AND GRIDS CHECKED BY (IV): R. D. Shoup	DATE 10-28-59
CONTROL PLOTTED BY (III): B. Wilson	DATE 11-06-59
CONTROL CHECKED BY (III): H. R. Rupolph	DATE 11-19-59
RADIAL PLOT ~~GRAPHIC CONTROL~~ BY (III): L. A. Senasack	DATE 06-09-60
STEREOSCOPIC INSTRUMENT COMPILATION (III): Not applicable	PLANIMETRY: DATE
	CONTOURS: DATE
MANUSCRIPT DELINEATED BY (III): R. Whitson Field Edit corrections: J. Y. Councill	DATE 07-12-60 11-16-62
SCRIBING BY (III):	DATE
PHOTOGRAMMETRIC OFFICE REVIEW BY (III): R. Gleser Field Edit Review: H. R. Rudolph	DATE 08-04-60 05-02-63

REMARKS:

Field Edit is complete only in Reid Bay (T-10706 & T-10707)

USCOMM-DC 36363-P66

FORM C&GS-181c
(3-66)

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

DESCRIPTIVE REPORT - DATA RECORD

3

CAMERA (KIND OR SOURCE) (III):

Wild RC-8 "W"

PHOTOGRAPHS (III)

NUMBER	DATE	TIME	SCALE	STAGE OF TIDE
55 W 9551 thru 9554	9-21-55	15:10	1:10,000	10.9 ft. above MLLW
55 W 9590 " 9593	"	15:32	"	11.6 " " "
55 W 9678 " 9680	9-22-55	10:05	"	4.1 " " "
*55 W 9687 " 9690	"	10:15	"	3.9 " " "
55 W 9696 " 9699	"	10:30	"	3.8 " " "

* T-10709

TIDE (III) PREDICTED

	RATIO OF RANGES	MEAN RANGE	DIURNAL RANGE
REFERENCE STATION: SITKA, ALASKA		7.7	9.9
SUBORDINATE STATION: Port Protection		10.1	12.4
SUBORDINATE STATION:			

Atlantic Marine Center
REVIEW BY (IV): C. H. Bishop — DATE: Jan. 1972

PROOF EDIT BY (IV): — DATE:

NUMBER OF TRIANGULATION STATIONS SEARCHED FOR (II): 25 — RECOVERED: 23 — IDENTIFIED: 15

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:

	Searched for	Recovered	Identified
T-10706	1	1	1
T-10707	11	9	4
T-10708	5	5	4
T-10709	8	8	6

USCOMM-DC 26393C-P6C

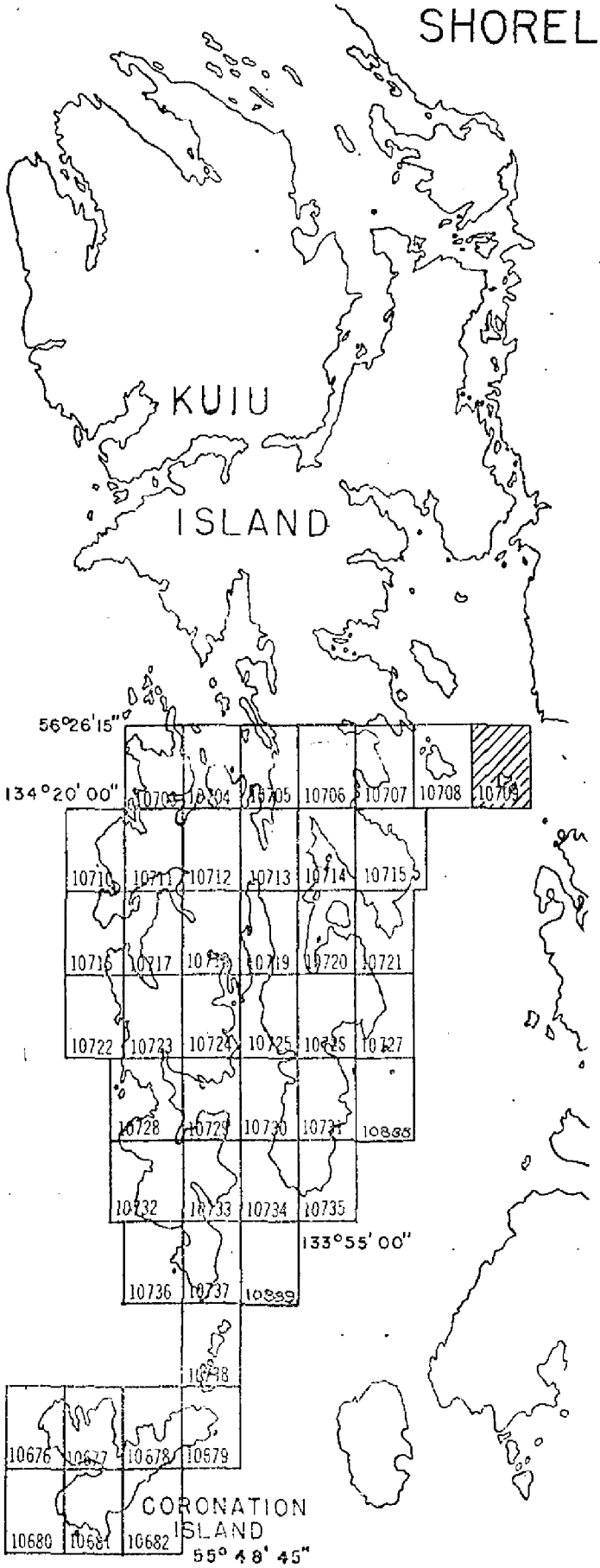
T-10709

COMPILATION RECORD	COMPLETION DATE	REMARKS
Copy for blueline	Feb. 1962	Superseded
Indefinite shoreline reinterpreted Field edit applied	Dec. 1963 Dec. 1965	
Final review	Jan. 1972	

SHORELINE MAPPING PROJECT

Ph-5702

CORONATION and KUIU ISLANDS, ALASKA



Official 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	1¼	2.6
10707	¼	7.7
10708	2	9.4
10709	1	3.0
10710	5	6.8
10711	11	7.7
10712	1¼	.9
10713	12	9.4
10714	5	8.5
10715	11	6.8
10716	¼	5.1
10717	9	11.1
10718	13	6.0
10719	8	11.1
10720	9	8.5
10721	¼	8.5
10722	2	4.3
10723	1¼	3.4
10724	11	10.2
10725	8	7.7
10726	11	4.3
10727	3	4.5
10728	10	14.5
10729	6	11.9
10730	5	4.3
10731	10	6.0
10732	10	6.[illegible]
10733	9	[illegible]
10734	3¼	3.4
10735	¼	4.[illegible]
10736	1	4.[illegible]
10737	6	8.[illegible]
10738	1	6.[illegible]
TOTAL	295	298.8

SUMMARY

DESCRIPTIVE REPORT T-10709

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. The only land area within the limits of T-10709 is Strait Island.

Compilation was by radial plot. A 1:20,000 scale plot, using 9-lens photography of 1958, was constructed to verify identified control and establish pass point positions for controlling a 1:10,000 scale plot using 1:10,000 scale ratio prints of single-lens photography 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 June 9, 1960 and Photogrammetric Plot Report, scale 1:10,000, dated June 10, 1960.

Field edit was performed in conjunction with hydrography in the summer of 1965. The 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.

FIELD INSPECTION REPORT

FOR

SUMNER AND STRAIT ISLANDS

MANUSCRIPTS NOS. T 10708 AND T 10709

2. AREAL FIELD INSPECTION

The area covered are two group of islands that lie north and east of REID BAY at the northwest end of SUMNER STRAIT.

The field inspection was confined to the areas in the immediate vicinity of the control stations. (See instructions on Project Diagram).

The shoreline along these islands is irregular, with many indentations, small wooded islands, islets and off-lying rocks. The foreshore is generally steep and rocky, except in the head of some of coves the beach consists of gravel. The islands rise to an approximate elevation 75 - 100 feet. They are covered with a dense growth of conifers. The trees usually extend from the HWL, although in some cases they overhang it.

The rock outcroppings in this area are in general of igneous and metamorphic origin. The most abundant outcrops are basalt and shale with intrusive calcite and quartz.

Densities and tones were not inspected on the land areas. 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. Contact prints were furnished for field use. Definition on the prints is generally good. Station identification was difficult in some cases due to the lack of discernable detail. The compiler may have difficulty in interpreting the MHWL in some portions due to overhanging trees and/or elongated shadows.

3. HORIZONTAL CONTROL

All horizontal control stations indicated on the project diagram for PH 5702 were searched for and reported on form 526.

The light has been removed from the STRAIT ISLAND LIGHTHOUSE. It should be classified as abandoned.

~~The identification of SCN 1927 is the only doubtful one made.~~ All ~~other~~ stations were positively identified.

Alaska No. 41,

The description listed on pages 29 and 30 for the four stations established in 1954 by personnel from the Ship LESTER JONES describes the stations as topographic stations. The lists of geographic positions classify them as third order triangulation stations. Recovery notes were submitted on form 526.

4. VERTICAL CONTROL

Inapplicable.

5. CONTOURS AND DRAINAGE

Contours - inapplicable.

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

6. WOODLAND COVER

The islands are heavily wooded being covered with conifers, mostly spruce. The trees extend inland from or very close to the HWL.

7. SHORELINE AND ALONGSHORE FEATURES

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

The only cultural features are a few buildings, used during the season, on the eastern side of the cove on the north end of SUMNER ISLAND. It is suggested that circled buildings be shown.

8. OFFSHORE FEATURES

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

9. LANDMARKS AND AIDS

The buildings referred to above should be charted as solid shapes for use as landmarks close inshore.

There are no fixed aids to navigation.

The floating aids will be located by the hydrographic party.

10. BOUNDARIES, ETC.

Inapplicable

11. OTHER CONTROL

None

12. OTHER INTERIOR FEATURES

Inapplicable

13. GEOGRAPHIC NAMES

Will be covered in a special report.

14. SPECIAL REPORTS AND DATA

	Title	Disposition
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 controling 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
9400A " 9412
9443 " 9457
9463 " 9478
9550 " 9570
9576 " 9593
9641 " 9649

55-W-9612 and 9613
9667 thru 9674
9678 " 9680
9687 " 9690
9696 " 9701
9704

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 templets and then drilled through the templets 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.

DELHI, 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. Sutstitute 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.

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° 17.4 N. and 133° 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

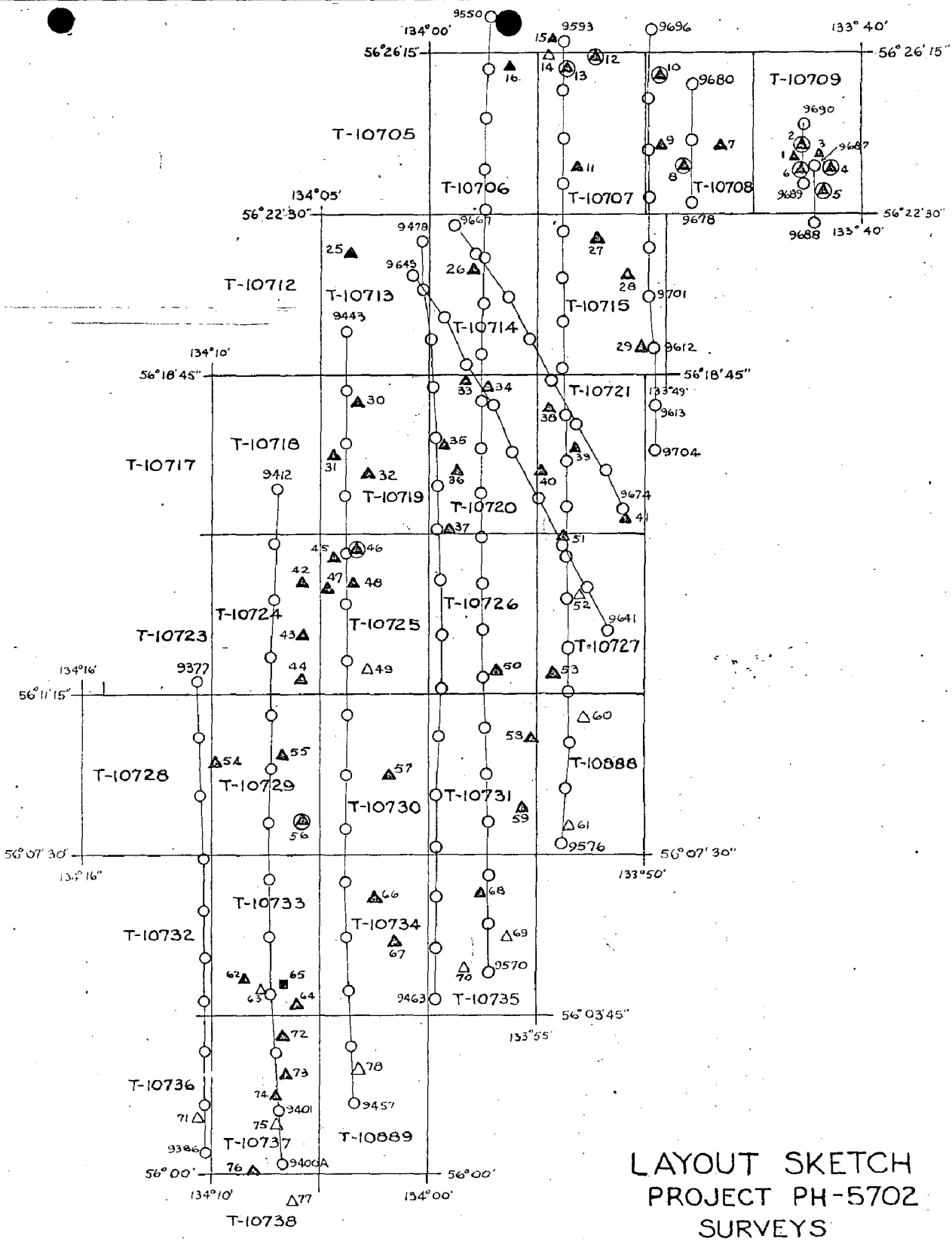
Leroy A. Senasack

Leroy A. Senasack
Carto. (Photo.)

LIST OF NUMBERED CONTROL STATIONS
PH - 5702

1. AGO, 1954
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
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. CAPE DECISION LIGHT, 1936
77. SPANISH ISLAND LIGHT, 1936
78. WAY, 1936

* On nine lens photo's only



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

- o Single lens office photographs
- ▲ Control station identified
- ⊘ Control station not held in plot
- △ Control station office identified
- ▣ Recoverable topo with field position

FORM 164
(4-23-54)

U.S. DEPARTMENT OF COMMERCE
DESCRIPTIVE REPORT

COAST AND GEODETIC SURVEY
CONTROL RECORD

MAP T-10709 PROJECT NO. PH-5702 SCALE OF MAP 1:10,000 SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR y-COORDINATE LONGITUDE OR x-COORDINATE	DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS FORWARD (BACK)	DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)	FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)
DELHI,1915	G-609 Pg.204	N.A. 1927	56° 23' 01.779" 133° 41' 45.789"			55.0 (1800.8) 785.7 (243.9)	
AGO,1954	Alaska III Pg.937	"	56° 23' 54.36" 133° 42' 51.98"			1681.4 (174.4) 891.6 (137.6)	
CON,1927	G-413 Pg.369	"	56° 24' 01.463" 133° 42' 39.409"			45.3 (1810.6) 675.9 (353.2)	
BIB,1954	Alaska III Pg.935	"	56° 23' 27.164" 133° 42' 38.423"			840.2 (1015.6) 659.2 (370.2)	
GAL,1954	Alaska III Pg.936	"	56° 23' 34.18" 133° 41' 25.18"			1057.2 (798.6) 432.0 (597.3)	
HOW,1954	Alaska III Pg.937	"	56° 23' 50.86" 133° 41' 56.62"			1573.1 (282.7) 971.2 (58.0)	
STRAIT ISLAND LIGHTHOUSE,1915	G-609 Pg.213	"	56° 23' 11.810" 133° 41' 49.661"			365.3 (1490.5) 852.1 (177.4)	
STRAIT,1954	Alaska III Pg.934	"	56° 23' 11.197" 133° 41' 51.577"			346.3 (1509.5) 885.0 (144.5)	

1 FT. = .3048006 METER

COMPUTED BY: M.CUNNINGHAM DATE 11/6/59 CHECKED BY: B.WILSON DATE 11/6/59

COMM-DC-57843

FORM 164
(4-23-54)

U.S. DEPARTMENT OF COMMERCE
DESCRIPTIVE REPORT

COAST AND GEODETIC SURVEY
CONTROL RECORD

MAP T-10709 PROJECT NO. PH-5702 SCALE OF MAP 1:10,000 SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR y-COORDINATE LONGITUDE OR x-COORDINATE	DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS FORWARD (BACK)	DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)	FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)
DELHI, 1915	Page 23	N.A. 1927	6,249,349.54 580,516.79				
SUB PT. "A" DELHI,1915	Comp.	"	6,249,406.01 580,420.07				
SUB PT. "B" DELHI,1915	Comp.	"	6,249,332.33 580,503.12				
AG O,1954	Comp.	"	6,250,953.72 579,350.81				
CON,1927	Page 24	"	6,251,177.35 579,562.57				
SUB PT. CON,1927	Comp.	"	6,251,125.64 579,475.81				
BIB,1954	Comp.	"	6,250,117.31 579,599.35				
SUB PT. "A" BIB,1954	Comp.	"	6,250,105.50 579,607.29				
SUB PT. "B" BIB,1954	"	"	6,250,126.71 579,703.93				
GAL,1954	"	"	6,250,357.94 580,851.19				
SUB PT. "A" GAL,1954	"	"	6,250,261.43 580,860.90				
SUB PT. "B" GAL,1954	"	"	6,250,205.85 580,875.38				

1 FT. = 3048006 METER

COMPUTED BY: M.CUNNINGHAM DATE 10/9/59

CHECKED BY: B.WILSON DATE 10/26/59

COMM-DC-57843

COMPILATION REPORT

Surveys T-10706, T-10707, T-10708, & T-10709

FIELD REPORT:

The field inspection report for the area of surveys T-10706 and T-10707 is part of the descriptive report for surveys T-10726 and T-10727.

PHOTOGRAMMETRIC PLOT REPORT:

The photogrammetric plot report is part of the descriptive report for surveys T-10726 and T-10727.

31. DELINEATION:

These manuscripts were delineated by graphic methods.

No field edit report by the 1962 field party was furnished the compilation office.

32. CONTROL:

Horizontal control was adequate.

33. SUPPLEMENTAL DATA:

None.

34. CONTOURS AND DRAINAGE:

Contours: Not applicable.
Drainage: No comment.

35. SHORELINE AND ALONGSHORE DETAILS:

All delineation was based on office interpretation of the photographs and some field inspection in the vicinity of control stations.

Interpretation of the mean high water line was difficult in many areas where shadows and overhanging trees obscured the shoreline. A dashed line was delineated in these areas.

Field edit data obtained during the 1962 season was applied to the manuscript in the area of Reid Bay.

36. OFFSHORE DETAILS:

No comment.

37. LANDMARKS AND AIDS:

None.

38. CONTROL FOR FUTURE SURVEYS:

None.

39. JUNCTIONS:

Junction has been made and is in agreement with T-10715 to the south. There are no details to be joined to the west with T-10705 and to the south with T-10714. There are no contemporary surveys to the north.

40. HORIZONTAL ACCURACY:

No comment.

41 thru 45:

Inapplicable.

46. COMPARISON WITH EXISTING MAPS:

U.S.G.S. Petersburg, Alaska - Canada, scale 1:250,000, 1952.

47. COMPARISON WITH NAUTICAL CHARTS:

Chart 8201, scale 1:217,828, 10th edition, published 17 July 1961

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

Respectfully submitted
3 May 1963

Joseph W. Vonasek

Joseph W. Vonasek
Super. Carto.

Approved and forwarded

Miller J. Tonkel
CDR, C&GS
Baltimore District Officer

SUPPLEMENTAL COMPILATION REPORT

T-10706 thru T-10709

Project 21016

As stated under item 35 of the Compilation Report, interpretation of the mean high-water line was difficult in areas where shadows and overhanging trees obscured the shoreline. A dashed, indefinite shoreline was originally delineated in these areas.

When additional nine-lens photography covering the northern portion of these surveys and the project to the north (21048, Ph-6206) became available, it was then possible to reinterpret these indefinite areas. The original single-lens photographs were used in conjunction with the nine-lens photography of July, 1961.

This work was accomplished in December, 1963 upon the completion of the radial plot for the project to the north which established the locations of several nine-lens centers in the area of these surveys.

Respectfully submitted,
14 January 1964

Raymond Glaser

Raymond Glaser
Carto. (Photo.)

October 26, 1971

GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-5702 (Alaska)

T-10709

Mariposa Reef

Strait Island

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° 18.8', Long. 133° 59.3' (T-10714). These objects show well on photographs 55-W-9475 and 9647.

Verify existence of what appears to be a pier in cove at Lat. 56° 18.2', Long. 133° 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.

USC&GSS PATTON J. K. RICHARDS, COMDG.

FIELD EDIT REPORT
Sumner Strait, S. E. Alaska
Project OPR 448 (PH 5702)
1965 Field Season

Manuscripts T-10706 thru T-10709

MANUSCRIPT T-10706:

No corrections are necessary.

MANUSCRIPT T-10707:

Office interpretation of the mean high water line was quite good, considering the rather low quality of the photographs used in this area. The eastern shore of Kuiu Island and the southern shore of Alvin Bay were hidden in shadows, making delineation of the high water line more difficult. In most areas the treeline may be considered to extend to the high water line. There were several areas where the high water line was offshore from the treeline; these distances were measured and recorded. All corrections were noted on the ozalid print and on photographs Nos. 9591, 9592, and 9697.

Delineation and classification of features below the mean high water line required some revision. This is especially true in shaded areas where it was difficult to see the foreshore area. All corrections were noted as above. There were several rocks that were bare above the mean high water line but were not delineated on the manuscript. Along the north shore of Alvin Bay, several rock ledges were found that were not delineated on the manuscript.

Location of all offshore rocks was verified by sextant fixes and their heights determined. This information is part of the hydrographic records for sheets HO-10-2-62 and PA-10-3-65.

MANUSCRIPT T-10708:

Considering the rather low quality of the photographs used in compilation, the office interpretation of the mean high water line was satisfactory. The western shore of Sumner Island was in shadows, making delineation of this area difficult. In general, office delineation of the high water line followed the treeline, which was erroneous in several areas where the high water line was offshore from the treeline. These areas were sketched on the photographs and cross-referenced on an ozalid print of the manuscript. Corrections were shown on photographs Nos. 9679, 9680, 9697, and 9698.

MANUSCRIPT T-10708 Cont. Project OPR 448 (PH 5702)

Alongshore and offshore features were accurately delineated with several minor exceptions. Several rocks were delineated correctly, but they were not shown to be above the high water line, as they actually were. The areas above the high water line were drawn on the photographs and noted on the ozalid print. There were several rocks shown on the manuscript at the north end of Sumner Island for which a thorough search was made at low water, but these rocks were not found. These are noted on the ozalid print only.

All offshore rocks were located by sextant fixes and their heights determined. This information is part of the hydrographic records for sheets HO-10-2-62, PA-10-1-65, and PA-10-3-65.

MANUSCRIPT T-10709:

Office interpretation of the mean high water line was excellent. There was only one area where revision was made to extend the shoreline beyond the office delineation. This extension of the high water line was drawn on photograph No. 9689 and noted on an ozalid print.

Several areas shown as rock ledges on the manuscript were found to be gravel areas. These were noted as above. Several rocks were found to be above the mean high water line. The area above the high water line was drawn on the photograph and noted on the ozalid print. A rock shown on the manuscript off the northwest side of Strait Island was thoroughly searched for, but no rock was found in this area. Other offshore rocks were verified by sextant fixes and their heights determined; this information is part of the hydrographic records for sheet PA-10-1-65.

N. A. H.
Neal A. Horst
LTJG, USESSA

Approved and forwarded.

James K. Richards
LCDR, USESSA
C. O. Ship PATTON

REVIEW REPORT T-10709

SHORELINE

January 6, 1972

61. GENERAL STATEMENT:

See Summary on page 6 of this Descriptive Report.

An ozalid comparison print, pages 31 through 32 , showing differences noted in Items 62 and 64, is bound with the original of this report.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS:

A comparison was made with Survey No. 4330, scale 1:20,000, dated Sept. 1 - Oct. 15, 1927. Differences between this map and T-10708 are shown in blue on the comparison print.

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. No significant differences were noted.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:

A comparison was made with a verified copy of Survey H-8861, scale 1:10,000, dated 1961. Differences between this survey and T-10709 are shown 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 Nov. 7, 1970. Nossignificant differences were noted.

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
January 6, 1972

Approved for forwarding:

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

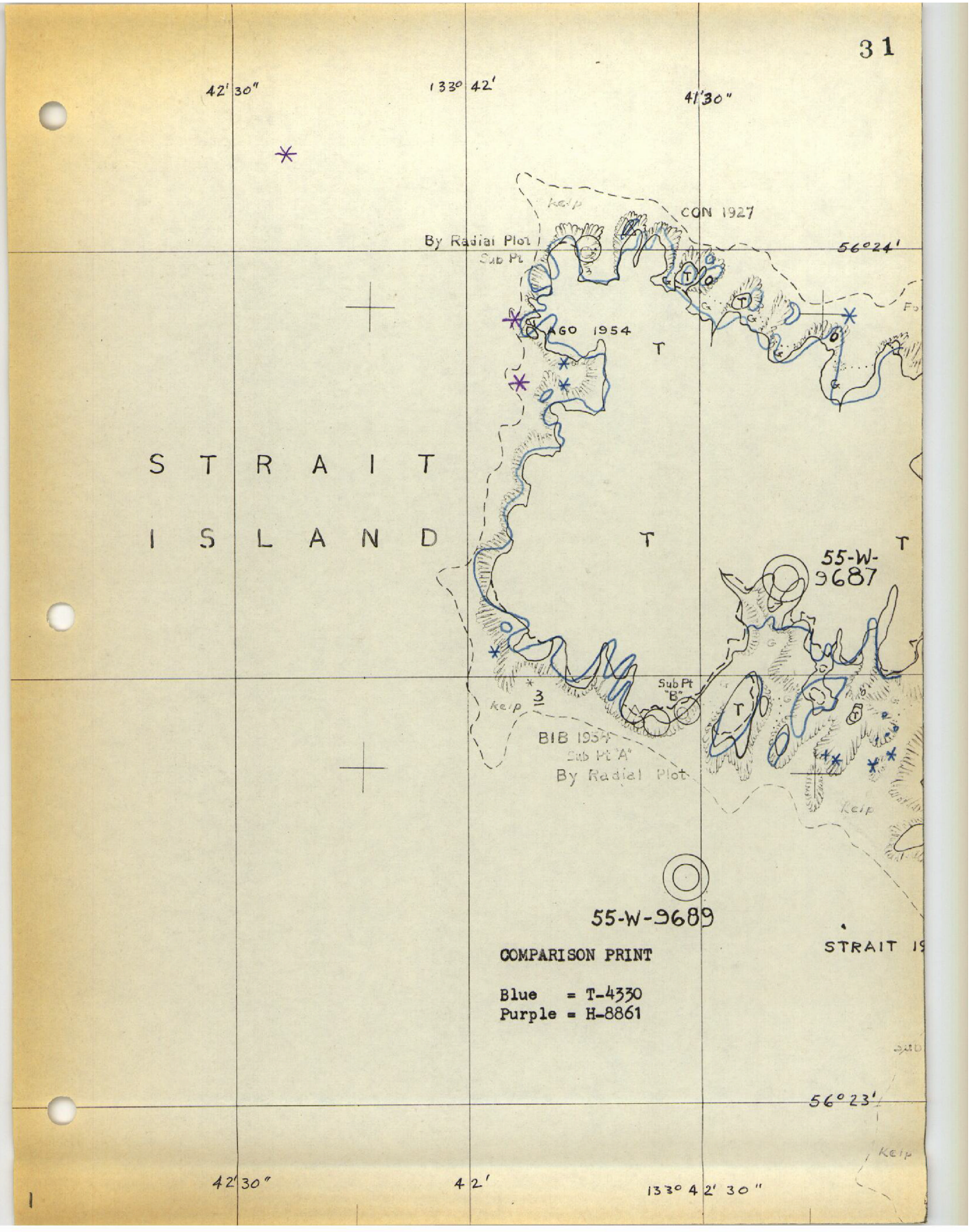
Approved:

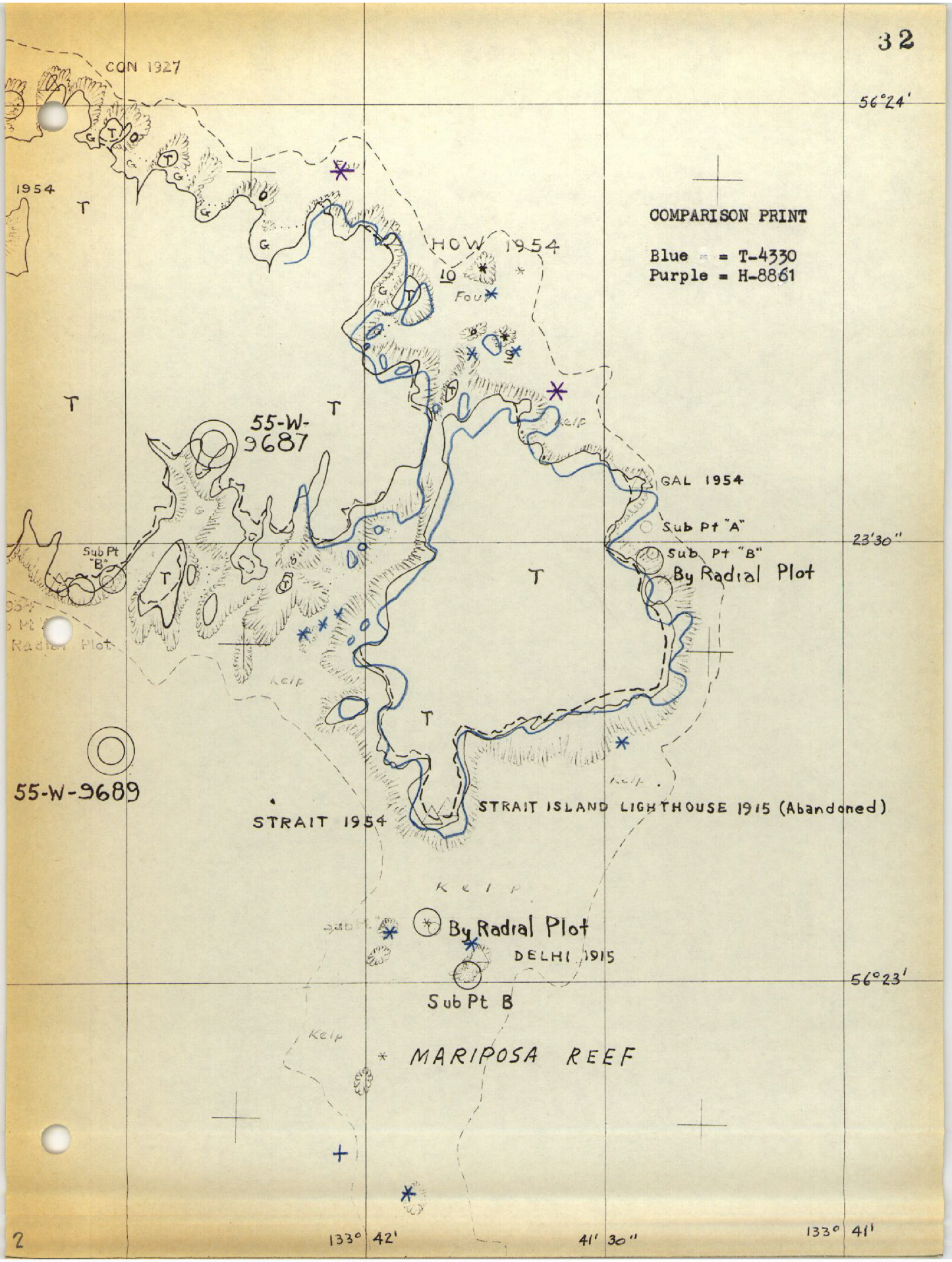
Alfred C. Holmes, RADM, NOAA
Director, Atlantic Marine Center

Approved:

Chief, Photogrammetric Branch

Jack E. Guth
Chief, Coastal Mapping Division


42' 30"
133° 42'
41' 30"
56°24'
kelp
CON 1927
By Radial Plot
Sub Pt
AGO 1954
T
S T R A I T
I S L A N D
55-W-9687
Sub Pt "B"
3
BIB 1954
Sub Pt "A"
By Radial Plot
55-W-9689
COMPARISON PRINT
Blue = T-4330
Purple = H-8861
STRAIT
56°23'
42' 30"
42'
133° 42' 30"


CON 1927
56°24'
1954
T
HOW 1954
10
Four
COMPARISON PRINT
Blue = T-4330
Purple = H-8861
55-W-
9687
GAL 1954
Sub Pt "A"
Sub Pt "B"
By Radial Plot
23'30"
Sub Pt "B"
Radial Plot
Kelp
55-W-9689
STRAIT 1954
STRAIT ISLAND LIGHTHOUSE 1915 (Abandoned)
By Radial Plot
DELHI 1915
56°23'
Sub Pt B
MARIPOSA REEF
2
133° 42'
41' 30"
133° 41'