

10708

10708

FORM C&GS-504

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

DESCRIPTIVE REPORT

Type of Survey SHORELINEField No. Office No. T-10708

LOCALITY

State ALASKAGeneral locality KUIU ISLAND - SUMNER STRAITLocality SUMNER ISLAND1955 - 65CHIEF 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

DESCRIPTIVE REPORT - DATA RECORD

1

T- 10706 thru T- 10709

PROJECT NO. (II): (Ph-5702) 21016			
FIELD OFFICE (III): Ship HODGSON		CHIEF OF PARTY J.E.Waugh	
PHOTOGRAMMETRIC OFFICE (III): Baltimore, Maryland		OFFICER-IN-CHARGE 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): 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): M.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): REEF 2, 1915-1927			
LAT.: 56° 24' 08.825"	LONG.: 133° 46' 36.143"	<input checked="" type="checkbox"/> ADJUSTED <input type="checkbox"/> UNADJUSTED	
PLANE COORDINATES (IV): y=6,251,330.83 x=575,499.98		STATE Alaska, UTM	ZONE 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

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 ANALYSIS BY (III): L. A. Senasack		DATE 06-09-60
STEREOSCOPIC INSTRUMENT COMPILATION (III): Not applicable		PLANIMETRY DATE
		CONTOURS DATE
MANUSCRIPT DELINEATED BY (III): Field Edit corrections: R. Whitson J. Y. Councili		DATE 07-12-60 11-16-62
SCRIBING BY (III):		DATE
PHOTOGRAMMETRIC OFFICE REVIEW BY (III): Field Edit Review: R. Glaser H. R. Rudolph		DATE 08-04-60 05-02-63
REMARKS: Field Edit is complete only in Reid Bay (T-10706 & T-10707)		

DESCRIPTIVE REPORT - DATA RECORD
T-10706 thru T-10709

3

CAMERA (KIND OR SOURCE) (III):

Wild RC-8 "W" & 9-lens

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 " " "
* 62216	July 1961			
* T-10708				

TIDE (III) PREDICTED

		RATIO OF RANGES	MEAN RANGE	diurnal STANDARD RANGE
REFERENCE STATION:	SITKA, ALASKA		7.7	9.9
SUBORDINATE STATION:	Port Protection		10.1	12.4
SUBORDINATE STATION:				
Atlantic Marine Center XXXXXXXXXX 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

T-10708

COMPILATION RECORD

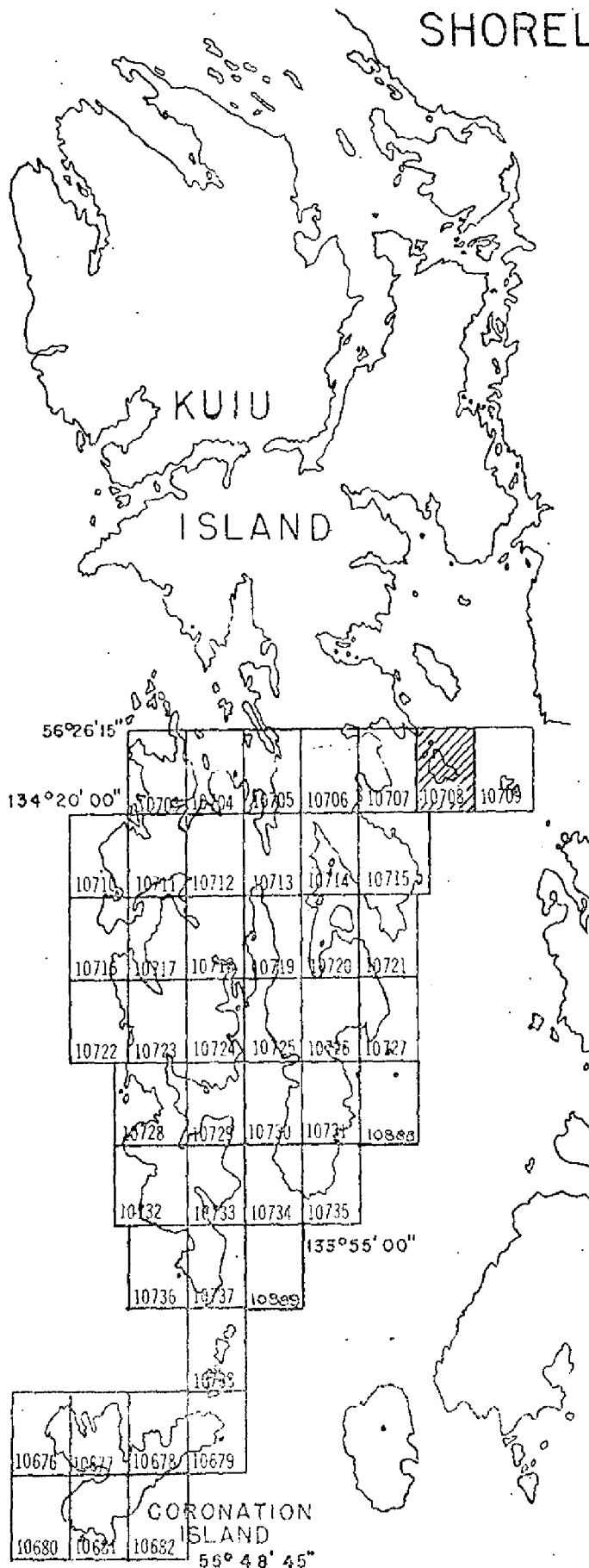
COMPLETION DATE

REMARKS

Copy for blue line	Feb. 1962	Superseded
Copy for smooth sheet	May 1963	Superseded
Indefinite shoreline reinterpreted	Dec. 1963	
Field Edit applied	Dec. 1965	
Final review	Jan. 1972	

SHORELINE MAPPING PROJECT

Ph-5702

CORONATION and
KUIU ISLANDS,
ALASKAOfficial Release For Cost AccountsCHATHAM
STRAIT

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	4	8.5
10722	2	4.3
10723	14	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	6.0
10733	9	5.3
10734	3	3.4
10735	4	4.7
10736	1	4.3
10737	6	8.5
10738	1	6.8
TOTAL	295	298.8

SUMMARY

DESCRIPTIVE REPORT T-10708

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. The entire area of Sumner Island is within the limits of T-10708.

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 scale plot was constructed directly on the 1:10,000 scale 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. Classification of this map is ADVANCE.

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

This 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 fore-shore 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 CON 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

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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 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.

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. 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 PRAK 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

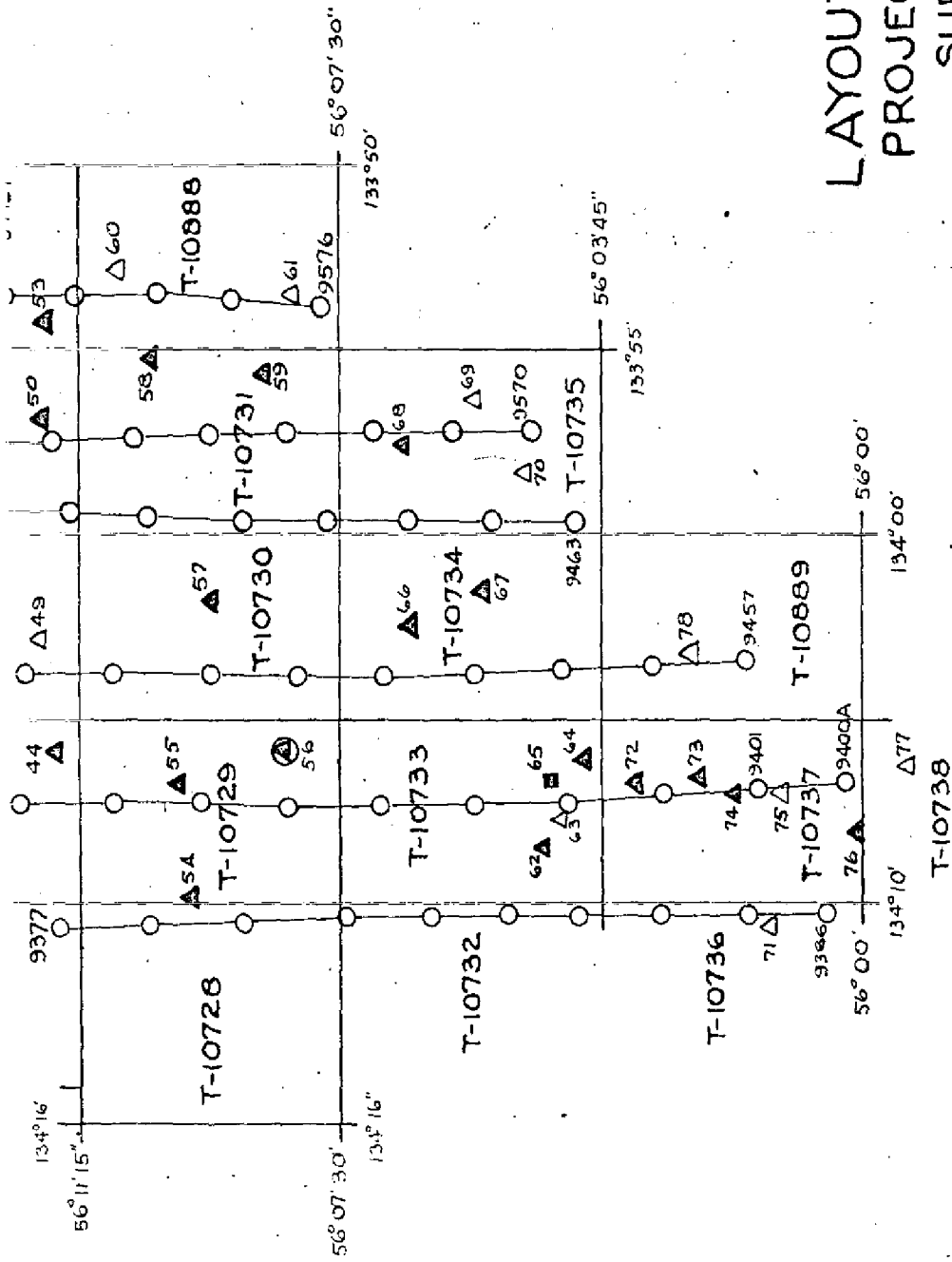
Leroy A. Senasack
Carto. (Photo.)

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

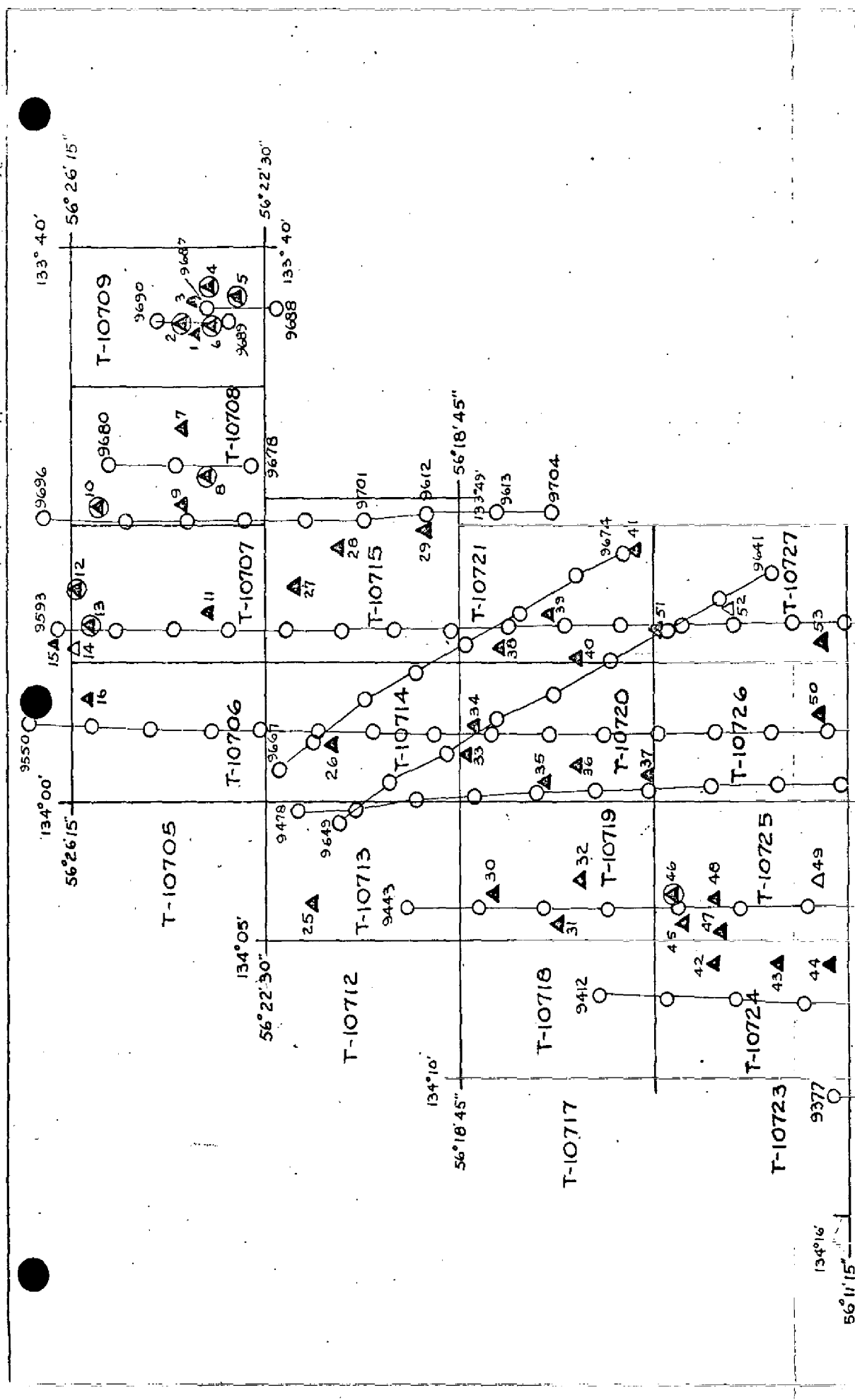


LAYOUT SKETCH PROJECT PH-5702

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

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



SCALE FACTOR

COMM-DC-57843

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

MAP T. 10708 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 (BACK)		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)	
				FORWARD	(BACK)	FORWARD	(BACK)	FORWARD	(BACK)
REEF 2,1915-1927	Page 24	N.A.	6,251,330.83 575,499.98						
SUB PT. "A" REEF 2,1915	Comp.	"	6,251,338.36 575,494.74						
SUB PT. "B" REEF 2,1915	Comp.	"	6,251,338.24 575,452.56						
FOX, 1929	Page 24	"	6,250,442.74 573,834.13						
SUB PT. FOX, 1929	Comp.	"	6,250,437.86 573,842.68						
THAT, 1927	Page 24	"	6,254,323.98 572,570.16						
SUB PT. THAT, 1927	Comp.	"	6,254,318.05 572,546.39						
NER, 1929	Page 24	"	6,251,203.49 572,910.94						
SUB PT. "A" NER, 1929	Comp.	"	6,251,211.11 572,909.82						
SUB PT. "B" NER, 1929	Comp.	"	6,251,304.64 572,971.71						
END, 1954	Comp.	"	6,250,331.10 575,732.35						
								2	2

1 FT. = 3048006 METER

COMPUTED BY: M. CUNNINGHAM

DATE 10/9/59

CHECKED BY: B. WILSON

DATE

10/26/59

COM-DC-57R43

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. DELINIZATION:

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:

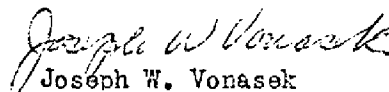
Chart 8201, scale 1:217,828, 10th edition, published 17 July 1961

Items to be applied to nautical charts immediately: None.

Items to be carried forward: None.

Respectfully submitted

3 May 1963



Joseph W. Vonasek

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-10708

Sumner 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. $56^{\circ} 18.8'$, Long. $133^{\circ} 59.3'$ (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. $56^{\circ} 18.2'$, 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 HIB, 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.

USO&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 Kuia 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 tree line may be considered to extend to the high water line. There were several areas where the high water line was offshore from the tree line; 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 tree line, which was erroneous in several areas where the high water line was offshore from the tree line. 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 Summer 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
James K. Richards
LCDR, USESSA
C. O. Ship PATTON

REVIEW REPORT T-10708

SHORELINE

January 5, 1972

61. GENERAL STATEMENT:

See Summary on page 6 of this Descriptive Report.

An ozalid comparison print, pages 31 through 35, showing differences noted in Items 62 through 65 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. Differences concerning rocks were noted in two areas - one north of Sumner Islands; the other in the small bay at the south end of Sumner Island. These are shown in brown on the comparison print.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:

A comparison was made with copies of the following hydrographic surveys:

H-8689, scale 1:10,000, dated 1962 (boat sheet)
H-8861, scale 1:10,000, dated 1965 (verified copy)
H-9101, scale 1:10,000, dated 1965 (boat sheet)

No differences were noted between H-8689 and T-10708. Differences between H-8861 and H-9101 and T-10708 are shown in purple on the comparison print.

Numerous rocks not mapped on T-10708 were mapped by the hydrographer on H-8861 and H-9101.

65. COMPARISON WITH NAUTICAL CHARTS:

A visual comparison was made with Chart 8201, scale 1:217,828, 16th edition dated Nov. 7, 1970. The only difference noted was three sunken rocks at approx. lat. $56^{\circ}26.0'$, long. $133^{\circ}48.2'$. H-9101 shows from 45 to 70 fathoms depth in this area and 19 fathoms depth just north of the area. See comparison print.

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 5, 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. ... *Jack E. Luth*
Chief, Photogrammetric Branch, ^{per} Chief, Coastal Mapping Division

26'

T-10708

Ph 5702

49°30"

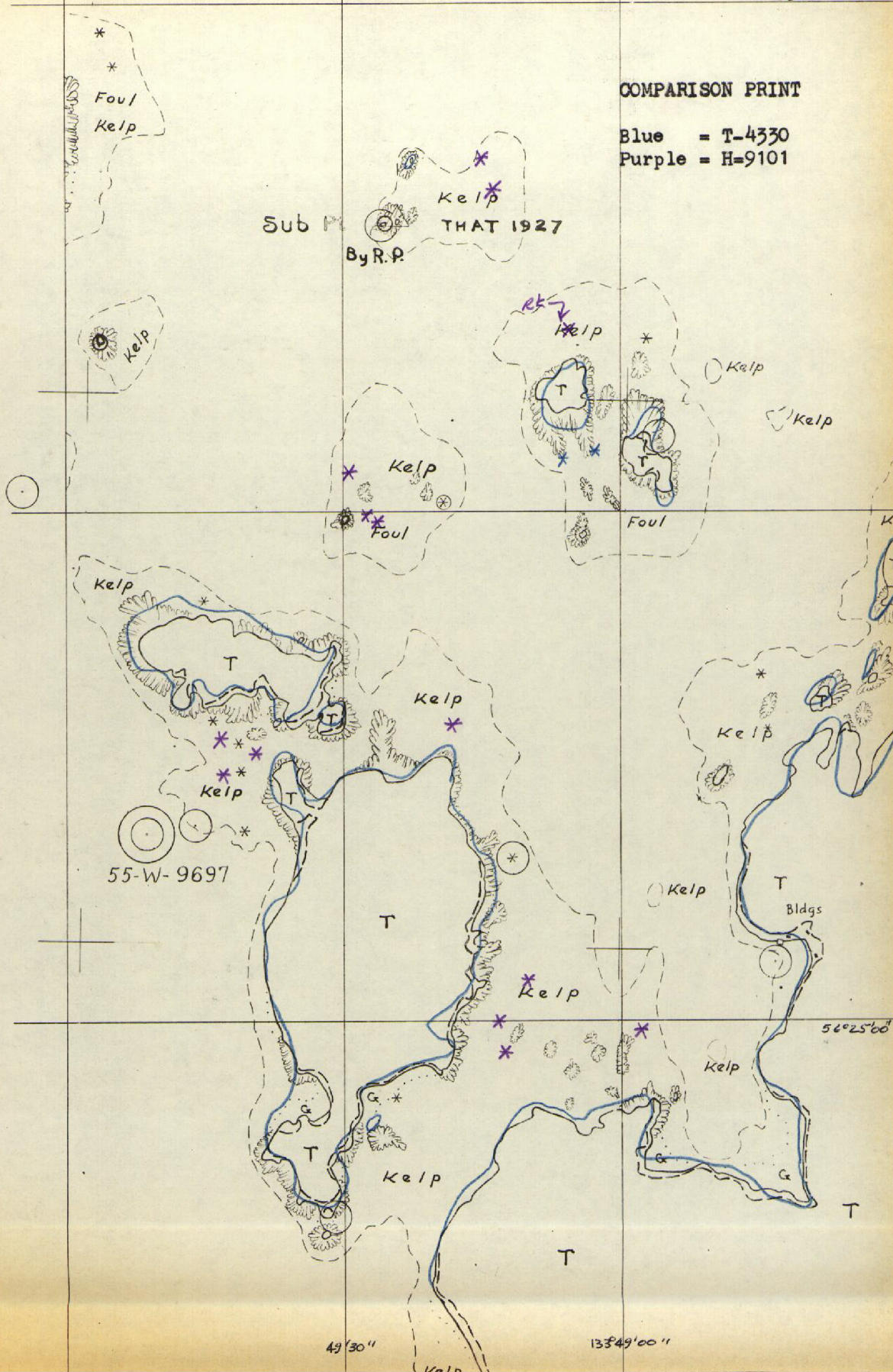
133°49'00"

31

56°26'00"

COMPARISON PRINT

Blue = T-4330
Purple = H=9101



25'

49°30"

133°49'00"

56°25'00"

48°30"

133°48'00"

47°30"

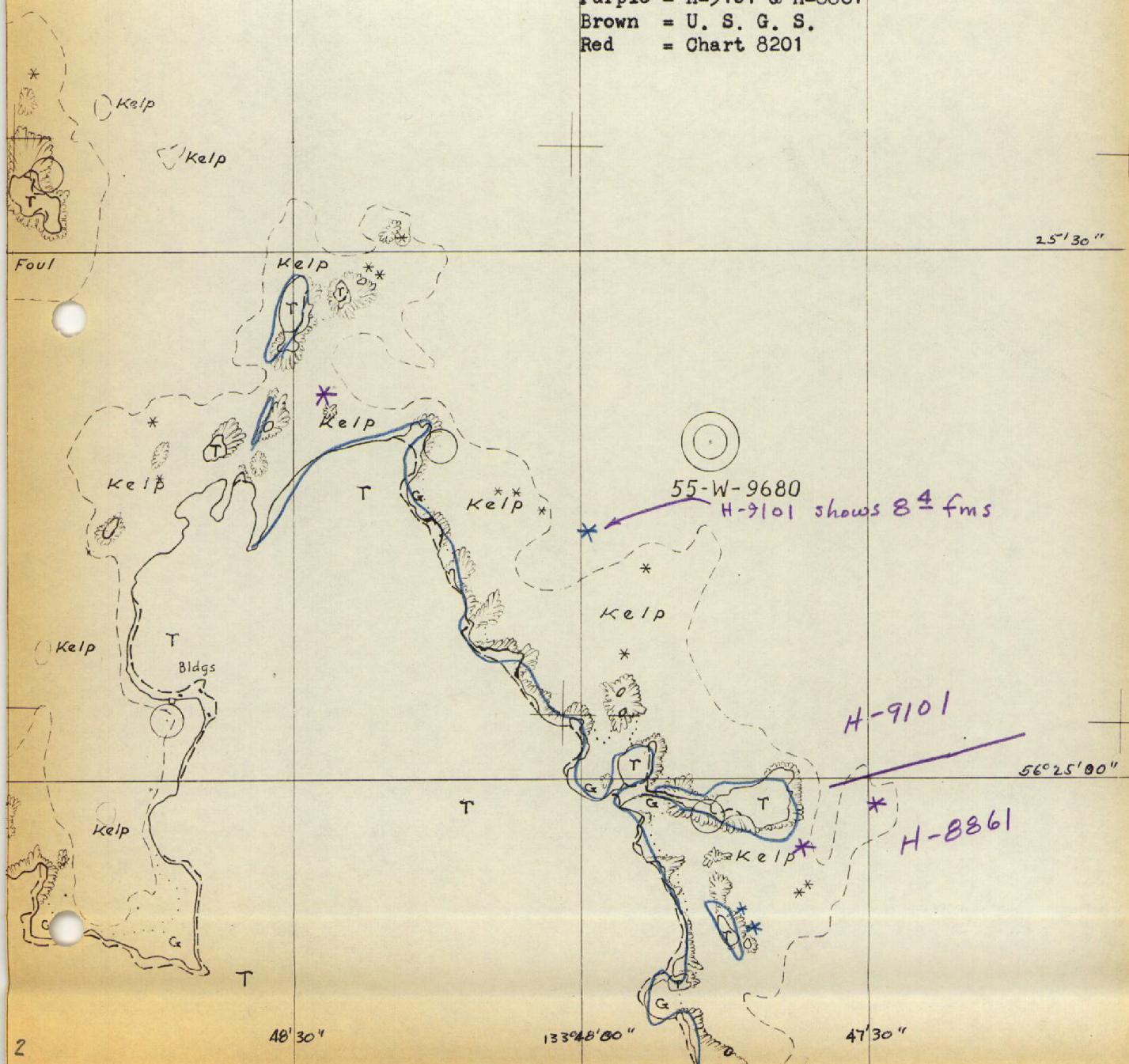
56°26'00"

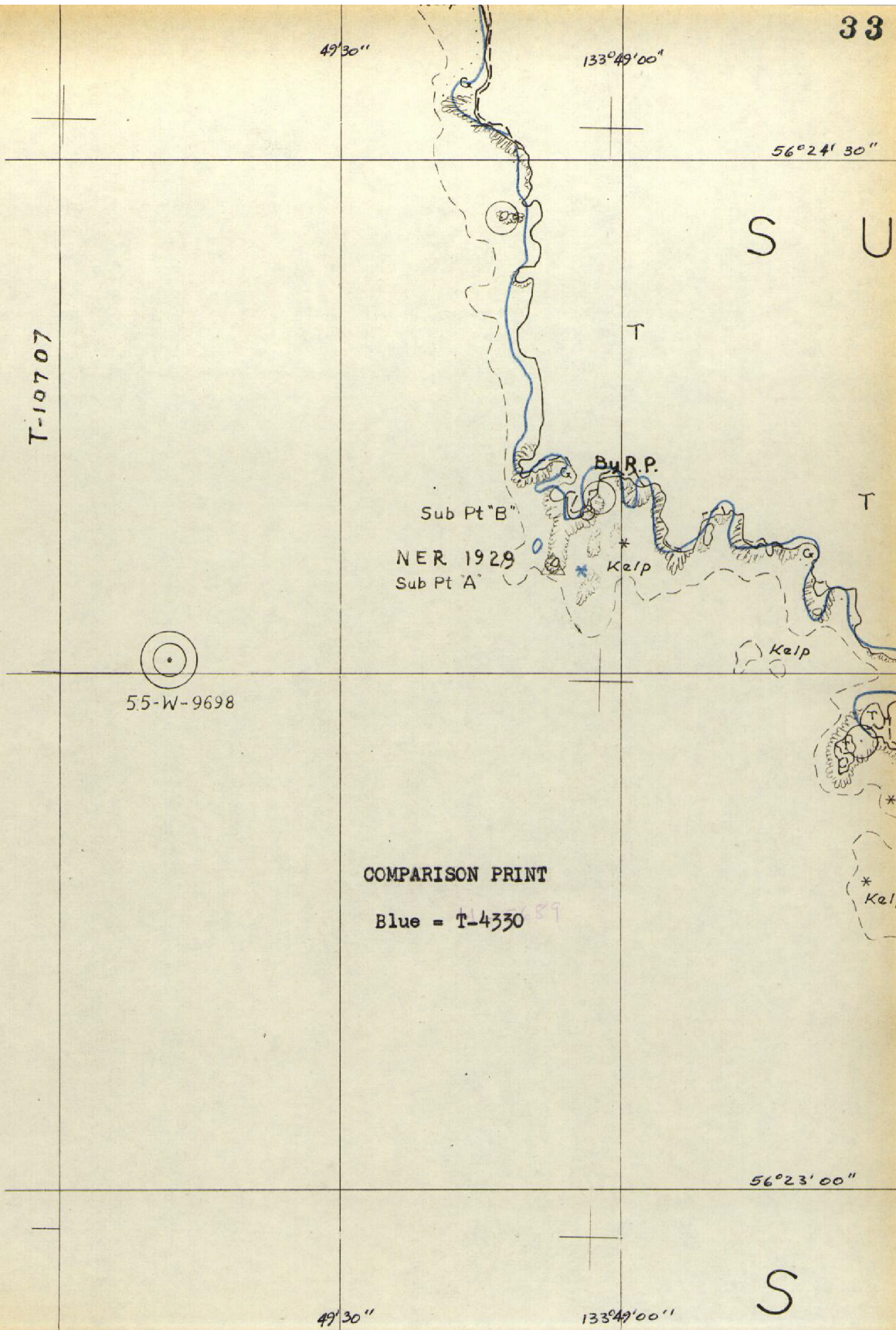
Also on Chart 8201

H-9101 shows 45 to 70 fms here

COMPARISON PRINT

Blue = T-4330
 Purple = H-9101 & H-8861
 Brown = U. S. G. S.
 Red = Chart 8201





COMPARISON PRINT

Blue = T-4330 89

133° 48' 00"

Kelp RK

H-8861

56° 24' 30"

S U M N E R I

COMPARISON PRINT

Blue = T-4330

Purple = H-8861

Brown = U. S. G. S.

55-W-9679

R.P.

Kelp

Kelp

* Kelp

Kelp

By R.P.

FOX 1929

Sub Pt

Kelp

Kelp

K e l p

24'

56° 23' 30"

S U M N E

