

9626

9626

Form 504	
U. S. COAST AND GEODETIC SURVEY	
DEPARTMENT OF COMMERCE	
DESCRIPTIVE REPORT	
Type of Survey <u>Shoreline (Photogrammetric)</u>	
Field No. <u>6087</u>	Office No. <u>T-9626</u>
LOCALITY	
State <u>Alaska</u>	
General locality <u>Prince of Wales Island</u>	
Locality <u>Bluff Island and Ruins Point</u>	
<u>1953 - 1955</u>	
CHIEF OF PARTY G. A. Nelson, Chief of Field Party E. H. Kirsch, Baltimore District Office	
LIBRARY & ARCHIVES	
DATE _____	

DESCRIPTIVE REPORT - DATA RECORD

T -9626

Project No. (II): 6087 PH-87 Quadrangle Name (IV):

Field Office (II): Ship LESTER JONES

Chief of Party: G.A. Nelson

Photogrammetric Office (III): Baltimore, Md.

Officer-in-Charge: E. H. Kirsch

Field: 3 June 1953

Instructions dated (II) (III): 28 Dec. 1953

23 Dec. 1954

25 Jan. 1955

Office: 17 Dec. 1953

12 Nov. 1954

6 Sept. 1955

Copy filed in Division of
Photogrammetry (IV)

Method of Compilation (III): Graphic

Manuscript Scale (III): 1:10,000

Stereoscopic Plotting Instrument Scale (III):

Scale Factor (III): 1.000

Date received in Washington Office (IV):

Date reported to Nautical Chart Branch (IV):

Applied to Chart No.

Date:

Date registered (IV):

Publication Scale (IV):

Publication date (IV):

Geographic Datum (III): N.A. 1927

Vertical Datum (III): MHW

Mean sea level except as follows:

Elevations shown as (25) refer to mean high water

Elevations shown as (5) refer to sounding datum

i.e., mean low water or mean lower low water

Reference Station (III): RUINS, 1937

Lat.: 56° 04' 01.592" (49.2m)

Long.: 133° 41' 59.874" (1035.9m)

Adjusted
~~XXXXXXXX~~

Plane Coordinates (IV):

State:

Zone:

Y=

X=

Roman numerals indicate whether the item is to be entered by (II) Field Party, (III) Photogrammetric Office,
or (IV) Washington Office.

When entering names of personnel on this record give the surname and initials, not initials only.

DESCRIPTIVE REPORT - DATA RECORD

Field Inspection by (II): P. A. Stark

Date: August 1955

THIS FIELD INSPECTION COMPRISED AN EDIT OF THE PRELIMINARY
MAP - ALSO INCLUDED THE RECOVERY AND IDENTIFICATION OF CONTROL.

Planetable contouring by (II):

Date:

Completion Surveys by (II):

Date:

SEE ABOVE

Mean High Water Location (III) (State date and method of location): 1953 date of photography - 1955
field inspection.

Projection and Grids ruled by (IV): A. Riley

Date: 1/6/54

Projection and Grids checked by (IV): C. Hanavich

Date: 1/11/54

Control plotted by (III): J. C. Cregan

Date: 9/22/55

Control checked by (III):

A. Queen
E. L. Williams

Date: 9/26/55
10/25/55

Radial Plot or Stereoscopic

~~Control extended~~ by (III): E. L. Williams

Date: 10/31/55

Stereoscopic Instrument compilation (III):

Planimetry

Date:

Contours

Date:

Manuscript delineated by (III): J. Honick

Date: 11/28/55

Photogrammetric Office Review by (III): R. Glaser

Date: 12/5/55

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

Date:

DESCRIPTIVE REPORT - DATA RECORD

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Camera (kind or source) (III): U.S.C. & G. S. nine-lens

PHOTOGRAPHS (III)

Number	Date	Time	Scale	Stage of Tide
41474 thru 41477	8/22/53	1025	1:10,000	7.7 above MLLW

Tide (III) From Predicted tables

Diurnal

Reference Station: Sitka
Subordinate Station: Pole Anchorage, Nosciusko I.
Subordinate Station:

Ratio of Ranges	Mean Range	Spring Range
	7.7	9.9
1.2	9.1	11.3

Washington Office Review by (IV): *Leo F. Beugnot, Atlantic Marine Center* Date: *July, 1968*

Final Drafting by (IV): Date:

Drafting verified for reproduction by (IV): Date:

Proof Edit by (IV): Date:

Land Area (Sq. Statute Miles) (III): 1

Shoreline (More than 200 meters to opposite shore) (III): 5.4 mi.

Shoreline (Less than 200 meters to opposite shore) (III): 1.2 mi.

Control Leveling - Miles (II):

Number of Triangulation Stations searched for (II): 3 Recovered: 3 Identified: 3

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

Number of Recoverable Photo Stations established (III): None

Number of Temporary Photo Hydro Stations established (III): 9*

Remarks:

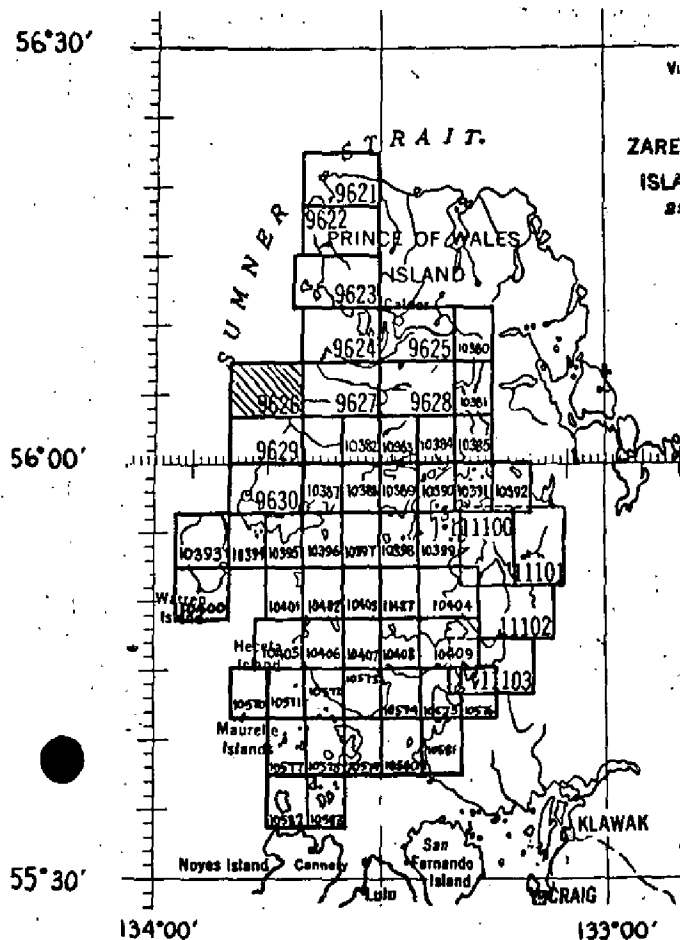
* One additional Hydrographic Signal located by Theodolite cuts.

T-9626

COMPILATION RECORD	COMPLETION DATE	REMARKS
PRELIMINARY MANUSCRIPT COMPILED	1954	FURNISHED FOR HYDRO B. E. D. T.
Compiled	Nov. 1955	— ADVANCE
Final Review	July 1968	

SHORELINE MAPPING PROJECT PH- 87

Prince of Wales Island, Alaska



Project Ph-87 Official Mileage for Cost Accounts

Sheet No.	Area Sq. Mi.	Lin. Mi. Shoreline
--------------	-----------------	-----------------------

9621	12	10
9622	16	11
9623	15	7
9624	17	12
9625	21	11
9626	4	5
9627	15	15
9628	14	2
9629	5	6
9630	7	6
11100	32	16
11101	9	8
11102	18	10
11103	16	15
10380	6	4
10381	5	10
10382	8	2
10383	6	8
10384	7	5
10385	4	8
10386	9	1
10387	6	7
10388	3	6
10389	7	12
10390	6	16
10391	4	12
10392	8	7
10393	12	10
10394	2	4
10395	5	8
10396	2	4
10397	1	1
10398	3	5
10399	4	11
10400	6	8
10401	1	2
10402	2	3
10403	3	6
11427	1	1
10404	5	10
10405	2	2
10406	8	1
10407	8	2
10408	5	7
10409	10	10

10570	1	1
10571	1	1
10572	5	6
10573	6	2
10574	3	4
10575	2	4
10576	7	2
10577	1	1
10578	2	2
10579	1	6
10580	2	2
10581	12	9
10582	2	6
10583	2	5

TOTAL 412 378

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SUMMARY TO ACCOMPANY
DESCRIPTIVE REPORT T-9626

Shoreline survey T-9626 is one of 58 similar surveys in project PH-87. It covers the area of Bluff Island and Ruins Point on Kosciusko Island. The primary purpose of the survey was to provide new shoreline for nautical charts and photo hydro support data for hydrographic surveys.

This survey was originally compiled as a preliminary manuscript. In 1955 additional horizontal control was established and identified and shoreline inspection was accomplished*. The manuscript was then re-compiled and classified as an Advance Manuscript.

Compilation was at 1:10,000 scale by graphic methods using the August 1953 9-lens photography. A cronaflex copy of the manuscript along with a blue line tracing, specially prepared photographs and ozalid prints were furnished for preparation of the boat sheet, location of photo-hydro signals and field edit use.

The manuscript is a vinylite sheet 3 3/4 minutes in latitude by 10 minutes in longitude which was smooth drafted and reproduced on cronaflex. One cronaflex positive and one cronar negative are provided for record and registry.

* COMPRISING AN EDIT

EDIT
FIELD ~~INSPECTION~~ REPORT (in part)

For

MAPS T-9623 to T-9630

(1955)

THIS FIELD WORK COM-
PRISED AN EDIT OF
THE PRELIMINARY MAN-
USCRIPT (T-9626)

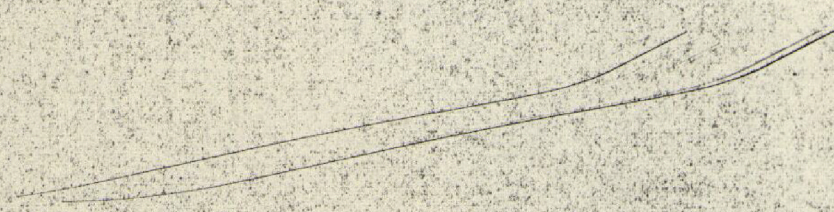
2. AREAL FIELD INSPECTION

The shoreline inspection was started from the southern limit of the 1954 work and continued southward to include all of the shoreline encompassed by the 1955 hydrography. Control Identification was further extended southward to Cape Pole and around the south end of Kosciusko Island to Holbrook Point at the head of Davidson Inlet.

The shoreline was inspected from an open skiff, and the inspection was intermittent, depending upon the weather, surf conditions and the locale of hydrographic operations.

The area inspected was heavily wooded, the tree line almost always reaching the high water line. The overall photographic coverage was good, being more than adequate for a good compilation of the shoreline. In some instances, however the foreshore was completely obliterated by excessive shadows on some of the photographs.

The locale being Alaska, a detailed inspection was not feasible and the field inspection was standard only with respect to control identification. No extra time was taken to make low tide inspection of any area to determine the low water line. Usually the foreshore was very steep, thus decreasing the relative importance of a low water line delineation. Where the gradient of the foreshore was gradual, a low water line was usually obtained by the hydrography that was done concurrently with the field inspection.



3. HORIZONTAL CONTROL

(a) New Stations

The following new stations were established by second-or third order triangulation:

*BILL	1938-1955	LOWER	1955	SHAKE	1955
CALDER	1955	MARBLE	1955	*SICKLE	1938-1955
CENTER	1955	MIDDLE	1955	*SLEEPY	1938-1955
DEAD 2	1955	MILTON	1955	SQUEEZE	1955
DIVIDE	1955	*MUD	1938-1955	TURN	1955
*FRAN	1938-1955	*PLAY	1938-1955	TWIST	1955
GRAZE	1955	QUARRY	1938	UPPER	1955
INNER	1955	SHAKAN STRAIT DAYBEACON, 1955			

*Although stations BILL, FRAN, MUD, PLAY, SICKLE and SLEEPY were set in 1938, no observations were made then to enable a determination of geographic positions.

- (b) No datum adjustments were made in 1955.
- (c) All control used in 1955 was established by the Coast & Geodetic Survey.
- (d) No specific stations were required by the instructions, and considerably more control was identified than required to meet the spacing requirements of Photogrammetry Instruction No. 46.
- (e) The following stations were determined lost:

ALDER, A	1922	OUT	1922
BIGHT	1922	SLIDE	1922
DEAD	1922	STATION ID. LIGHT	1915
ISLE	1922	TATNE	1922

Station ISLE was considered lost as a triangulation station because the center mark was missing. However, its probable location, to within less than a foot, was readily determined and the station was identified for photo control.

Two stations, BLUE 1903 and ROUND 1903 were searched for but not found. Because of unfavorable surf conditions, station BLACK 1903 was identified from offshore by description and was not recovered.

(f) The following fifty-six stations were identified for photo control and entered on Control Identification Cards

Station	Map No.	Photo. No.	Station	Map No.	Photo. No.
ALCOA 1946	D	41451	MINE 1946	D	41446
BEAR 1903	E	41492	NEW 1922	T-9624	41543
BEND 1922	T-9627	41540	NUTT 1937	T-9626	41476
BILL 1938-55	T-9627	41512-13	ON AUG 1937	W. of A	41314
BLACK 1903	S. of A	41317	*LITTLE POLE ANCHORAGE		
BLUFF 1886	T-9626	41475	OUTER LIGHT, 1937	T-9630	41330
BUSH 1922	T-9627	41541	PERK 1937	T-9627	41499
CAMP 1937	T-9629	41473	PHIL 1937	T-9627	41501
CENTER 1955	T-9624	41543	PIES 1937	T-9629	41442
CHAN 1937	T-9630	41314	PINK 1903	D	41492
DARTS 1946	D	41453	PLAY 1938-1955	T-9627	41497
DEAD 2 1955	T-9625	41607	POLE 1886	T-9630	41312
DIVIDE 1955	T-9624	41541	QUARRY 1955	T-9625	41608
EDNA 1946	D	41451	QUARTZ 1903	A	41316
GILLE 1946	F	41451	RED 1903	D	41451 & 41687
GRAZE 1955	T-9624	41541	REEF 1922	T-9624	41511
GREEN 1903	F	41447	ROS (4th order)	T-9624	41511
GRIM 1937	T-9627	41500	RUINS 1937	T-9626	41476
HALL 1937	A	41315	SCRAB 1937	T-9630	41332
HAMILTON ID. DAY-			SHAKAN STRAIT		
BEACON, 1954	T-9624	41510	DAYBEACON, 1955	T-9624	41541
HIP (4th order)	T-9624	41511	SHAKE 1955	T-9624	41542
HOLBROOK 1903	C-	41515	SICKLE 1938-1955	T-9627	41512
INNER 1955	T-9623	41565	SLEEPY 1938-1955	T-9627	41512
ISLE 1922	T-9624	41540	STATE 1922	T-9624	41510
LEDGE 1922	T-9625	41541	STRAW 1903	A	41327
LICHEN 2 1937	W. of A	41315	TWIST 1955	T-9624	41543
LONE 1922	T-9625	41606	UPPER 1955	T-9625	41609
MIDDLE 1955	T-9624	41608	VENT 1937	T-9627	41501
			WOLF 1903	D	41687

*This light is described under the name of OUTER LIGHT on Triangulation Index, Alaska No. 41, and FISHERMANS HARBOR OUTER LIGHT in the Coast Guard LIGHT LIST.

Paragraph 4, 5, & 6 Inapplicable.

7. SHORELINE & ALONGSHORE FEATURES

- The mean high water line was adequately compiled on the preliminary Manuscripts and exceptions duly noted on field photos.
- Inasmuch as the foreshore area was usually very steep, delineation of the low-water line was relatively unimportant, and no extra time was taken to make a low-water inspection of any area.
- The foreshore was usually very steep and composed of solid bedrock. Exceptions were noted on field photos.

- (d) Bluffs and cliffs were noted on field photos. The only prominent cliff encountered was on the east side of Bluff Island.
- (e) The pier indicated on the west side of Fontaine Island (Shakan Strait) was deleted, and the adjoining buildings abandoned. The only other structure encountered was the site of an abandoned logging camp (clearly visible on photos) located at the head of a small bight $\frac{1}{4}$ mile southeast of triangulation station PIES, 1937. Adequate notes were made on the field photos.

8. OFFSHORE FEATURES

Delineation of foul areas was well done on the Preliminary Manuscripts, this opinion having also been expressed by the Hydrographer. Additional notes were during the field inspection and all important offshore rocks and heavy kelp areas were located by either the field inspection or the concurrent hydrography.

9. LANDMARKS AND AIDS

Information regarding landmarks and aids was covered by the concurrent hydrographic phase of the project. A copy of Form 567 is submitted as supplemental data.

10. BOUNDRIES, ETC., INAPPLICABLE

11. OTHER CONTROL

Reference may be made to plane table survey T-6589, Bluff Island to Hard-scrabble, 1937.

One recoverable topo station, ERV, was established during the 1955 Field Season. This station was marked in 1954 but no position determined at that time. During the 1955 Field Season, a fourth-order theodolite position was determined and the appropriate data recorded on Form 524.

All station names were inked on the field photos on which they were pricked. At no time was it necessary to refer to or use the office photos. When a direct prick was not possible, a substitute station was selected and the necessary data recorded on C.S.I. Cards.

The following photo-hydro stations were established:

Map T-9624

<u>Station</u>	<u>Photo. No.</u>
Car	41502
Dum	41509
Elk	41502
Fir	41509
Got	41509
Ill	41509
Jeb	41502
Kay	41510
Let	41501
Mow (Sub pt)	41501
Nob (Sub pt)	41501
Sip	41501

Map T-9626

<u>Station</u>	<u>Photo. No.</u>
Ina (Sub pt)	41476
Jit	41475
Kid	41475
Kip (Sub Pt)	41477
Lam	41475
Liz (Sub Pt)	41476
Mag	41500
Own (Sub Pt)	41476
Pod	41475

Map T-9627

<u>Station</u>	<u>Photo. No.</u>
Caf	41475
Rev	41475
Sag	41499
Tax	41499
Use	41499

Map T-9629

<u>Station</u>	<u>Photo. No.</u>
Air	41333
Bad	41333
Dan	41442
Doc	41474
Eon	41472
Flo	41473
Gob	41333
Hag	41442
Hut	41474
Lux	41441
Ned	41473
Obi	41333
Ova (Sub pt)	41473
Pil	41473
Rap	41473
Pub (Sub pt)	41473
Neo	41473
Tea (Sub pt)	41473
Wac (Sub pt)	41442
Zam (Sub pt)	41442
End (T-9630)	41332

The above stations are listed under the Manuscript Numbers indicated in the new Map-Photo Index sent to this party at the beginning of the 1955 field season.

12. Interior Features. Not applicable.
13. Geographic Names. None recommended during the 1955 field season.

14. SPECIAL REPORTS & SUPPLEMENTAL DATA

<u>Item</u>	<u>Date</u> <u>Trans. Ltr.</u>	<u>Package No.</u>
Photo Data	30 July 1955	1, 2, 3, 4
Triangulation Data	31 July 1955	5, 6
Triangulation Data	28 September 1955	11, 12
Photo Data	30 September 1955	13, 14, 15
Field Inspection Report & Miscellaneous Data	1 October 1955	16

Reference may also be made to the following applicable data:

Plane Table Survey T-6589, 1937, Bluff Island to Point Hardscrabble.

Graphic Control Sheets, LJ-A-55 and LJ-B-55.

The 1955 Hydrographic Surveys. Boat Sheets were forwarded to the Washington Office and prints are available.

Respectfully submitted,

/s/ P. A. Stark
Lt. USC&GS

Approved and Forwarded,

/s/ George A. Nelson,
Comdr., USC&GS
Chief of Party

MAP T-9626

PROJECT NO. Ph-87.

SCALE OF MAP.....1:10,000.

SCALE FACTOR

[illegible]

1 FT. = 3048006 METER

COMPUTED BY: J. C. Cregan

DATE 10/25/55

CHECKED BY: E. L. Williams

DATE 10/25/55

COMM-DC-57843

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PHOTOGRAMMETRIC PLOT REPORT
PROJECT 6087

Surveys T-9624 thru T-9628

21. AREA COVERED

This radial plot covers the area of surveys T-9624 thru T-9628 and the southeast corner of T-9623. They are shoreline surveys located on the Prince of Wales Island, Alaska, along Sumner Strait, and cover the areas of Shakan and Shipley Bays.

22. METHOD - RADIAL PLOT

Map Manuscripts:

Vinylite sheets with polyconic projections in black, at a scale of 1:10,000 were furnished by the Washington Office. Base sheets were prepared in this office.

All control stations and substitute stations were plotted using the meter bar and beam compass.

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

Photographs:

All photographs used are nine-lens unmounted photographs, at a scale of 1:10,000. Thirty-one photographs were used in the radial plot, and are numbered as follows:

41474 thru 41477
41498 thru 41502
41508 thru 41513
41537 thru 41544
41605 thru 41610
41630 and 41631

Standard symbols were used on the photographs.

Templets:

Vinylite templets were prepared for all photographs. A master templet was used to correct for paper and film distortion, and for chamber displacement.

Closure and Adjustment to Control:

Vinylite base sheets were prepared in this office. Because there were no grid lines on the manuscripts, some intersections of the manuscript projections were transferred to the base sheets. These common intersections were held in order to transfer the control.

The radial plot was laid, tying into points established in a previous plot laid in December 1954 for surveys T-9622 and T-9623 to the north. The flights beginning with photographs 41508 and 41544 were laid first, and extended southward.

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22. METHOD - RADIAL PLOT (cont'd)

Closure and Adjustment to Control: (cont'd)

The plot was then extended to the east and to the west. Some control stations could not be held, but a satisfactory plot was obtained. In Calder Bay station INNER, 1955 could not be held in the plot.

Transfer of Points:

The map manuscripts were placed over the finished plot and oriented by holding the control and intersections that had been transferred to the base sheets. All pass points and photograph centers were pricked on the map manuscripts.

23. ADEQUACY OF CONTROL

There was adequate control to obtain a satisfactory radial plot.

The following stations could not be held in the plot:

INNER, 1955. The radially plotted position is 8 meters southwest of the geographic position. This sub. pt. was a very poor image point and it is quite possible the wrong rock was identified on the office photograph.

MIDDLE, 1955. The radially plotted position is 0.2 mm southwest of the geographic position.

ISLE, 1922. The radially plotted position is 0.4 mm east of the geographic position. Station ISLE, 1922 was reported lost, but the RM was recovered. The azimuth station was listed on the control identification card as BLACK, 1922 by the field man. The orientation of the control identification card indicates that either BEND, 1922 or BUSH, 1922 probably was used.

UPPER, 1955. The control station identification card describes the sub point as a ledge, but the image pricked on the field photograph is a tree laying over. The ledge was not visible on the office photographs and this sub. station was not used to control the plot.

RUINS, 1937. The radially plotted position for Sub. Pt. No. 1 is 1.1 mm northwest of the geographic position. However, Sub. Pt. No. 2, which is a more definite image point, was held in the plot.

PHIL, 1937. The radially plotted position is 0.4 mm northwest of the geographic position. This is probably a matter of inaccurate identification, because VENT, 1937 to the north, and PERK, 1937 to the south were held in the plot.

BILL, 1938-55. The radially plotted position from Sub. Pt. No. 1 is 0.7 mm southwest of the geographic position. Sub. Pt. No. 2 was held in the plot. The distances measured to these sub stations were stadia distances of 100 meters and 228 meters.

23. ADEQUACY OF CONTROL (cont'd)

NIPPLE, 1922. This station was office identified, and extreme elevation and tilt made the identification very weak.

LONE, 1922. This station was office identified in 1954 measuring from the lone tree as described in the 1922 description. The 1955 identification of a Sub Pt. for LONE, 1922 was the same image point as the office identification of the station. Consequently, the pricking was not changed on the office prints. LONE, 1922 and not the position of Sub. Sta. LONE, 1922 was held in the radial plot. LEDGE, 1922 just to the south of LONE, 1922 held in the plot. This confirms the office identification of the station and tends to indicate the field identification may be in error.

H HIP, 1955. The radially plotted position is 0.3 mm northeast of the geographic position for this hydrographic signal, which was computed in the field as less than third-order.

24. SUPPLEMENTAL DATA

None.

25. PHOTOGRAPHY

* The photographic coverage and definition of photographs used in the plot were good. However, the office prints were in poor condition as the result of being used in a previous plot of the same area, as well as in preliminary compilation and in two field seasons with the hydrographic party. It is believed that new office prints would have made control identification easier, because the office identification of control for the preliminary surveys interfered with pricking of field identified control. In addition, the condition of the office prints undoubtedly resulted in local distortions of the paper and emulsion, so that the resulting templates could not be adjusted as well as a new flat print. A request for new prints was not made at the start of the radial plot because the completion date for this project did not allow sufficient time.

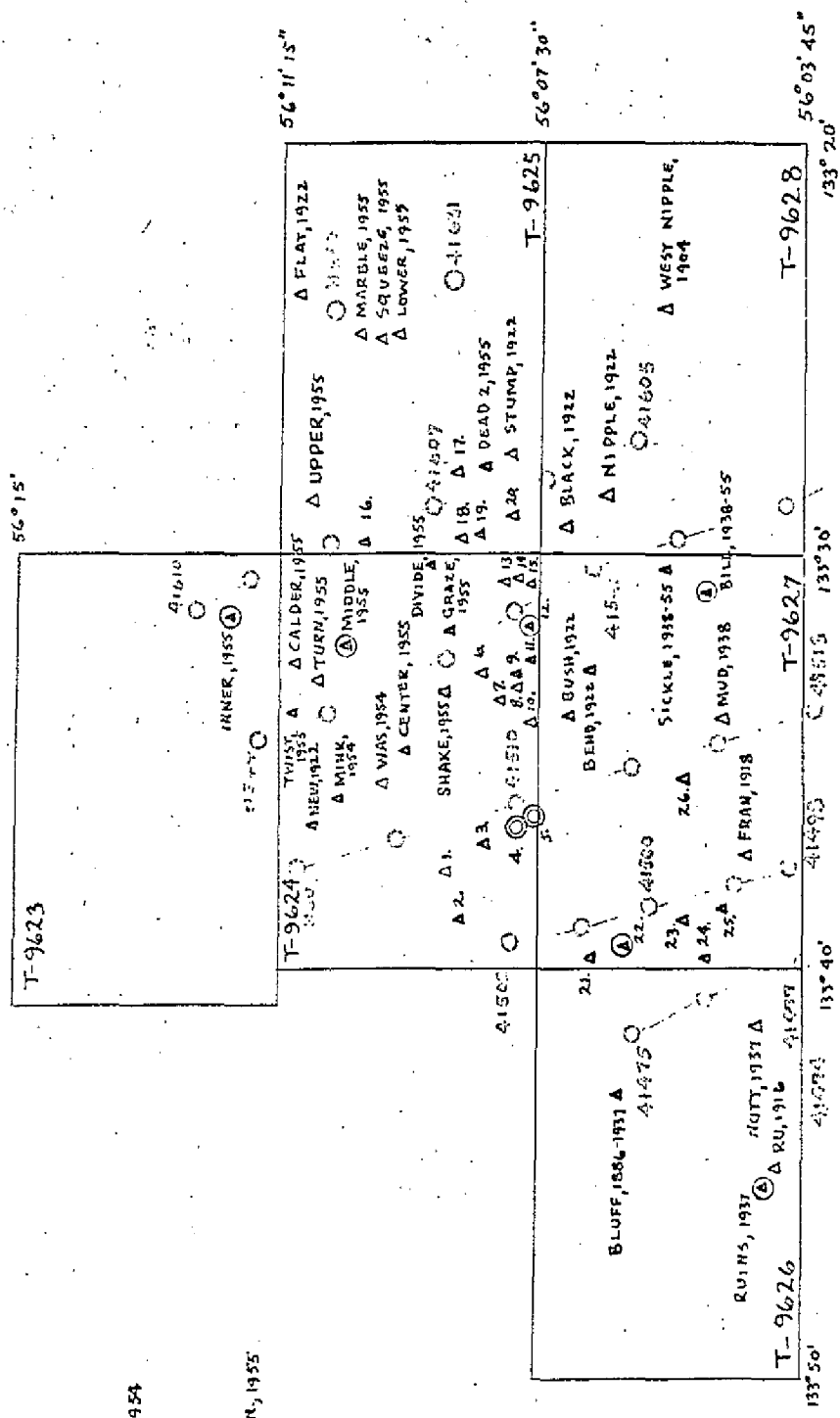
* Refer to headings 22 & 23

Respectfully submitted
22 November 1955

E. L. Williams
E. L. Williams
Cartographic Aid (Photo.)

LAYOUT SKETCH PROJECT 6087 SURVEYS T-9623 thru T-9628

1. STATION 15, L.H., 1954
2. SNACK, 1886
3. STA. 1, 1922
4. W. 1, 1955
5. RO. 1, 1955
6. MILF, 1955
7. LJM, 1915
8. END, 1922
9. HAMILTON IS. DAY BN., 1954
10. LOG A, 1912
11. REEF, 1922
12. ISLE, 1922
13. HAM, 1922
14. SHAKAH STRAIT DAY BN., 1955
15. TRIPLE, 1922
16. GUARRY, 1955
17. MOR, 1922
18. TAIHE, 1922
19. PASS, 1922
20. CREEK, 1922
21. LOUS, 1922
22. LEDGE, 1922
23. WEST, 1922
24. EAST A, 1922
25. MIL, 1922
26. VENT, 1937
27. PHIL, 1937
28. PERK, 1937
29. GRIM, 1937
30. SHIP, 1937
31. SLEEPY, 1938-55



- Nine-lens office photographs
- △ Control stations identified
- ⊙ Control stations not identified
- ⊙ Control stations not held in plot
- ⊙ Hydro Signal identified
- ⊙ Hydro Signal not held in plot

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COMPILATION REPORT
T-9626

Field Inspection Report:

1. Preliminary Field Inspection Report, Maps T-9623 thru T-9627, May-July 1955, Combined Operations, USC&GS Ship LESTER JONES, Project CS-347-Ph 87, submitted by P. A. Stark. *NO COPY OF REPORT FOR THIS WORK AVAILABLE AT TIME OF FINAL REVIEW*
2. Field Inspection Report, Maps T-9623 thru T-9630, Combined Operations - USC&GS Ship LESTER JONES, Project 1347 (Ph-87) submitted by P. A. Stark. (See ~~Descriptive Report T-9624~~)

Photogrammetric Plot Report - is part of the ^{this} Descriptive Report ~~for~~ survey No. ~~T-9624~~.

31. DELINEATION

This manuscript was delineated by graphic methods.

32. CONTROL

Refer to Photogrammetric Plot Report.

33. SUPPLEMENTAL DATA

A copy of boat sheets LJ-1255 for Survey H-8244, and LJ-1355 for survey H-8245 were available for comparison purposes.

Theodolite cuts from triangulation stations on survey T-9627 were furnished for the photo-hydro and hydrographic signals in this area.

34. CONTOURS AND DRAINAGE

Contours: Inapplicable.
Drainage: No comment.

35. SHORELINE AND ALONGSHORE DETAILS

The shoreline inspection was adequate.

Where shadows or relief displacement obscured the shoreline on the photographs, it had to be shown with a broken line. The low water lines and ledge areas are based on data furnished by the field party.

36. OFFSHORE DETAILS

The manuscript was compared with the boat sheets and several rocks were identified on the photographs from positions indicated on the boat sheets and delineated on the manuscript. Several rocks were not visible on the photographs which are at a high stage of tide. See part 46 of regarding rocks delineated on Survey T-6589 (1937).

36. OFFSHORE DETAILS (cont'd)

The kelp lines were delineated as indicated by the field party. See par. 36 of the Descriptive Report for survey T-9624 regarding the foul lines on the preliminary manuscript.

Several discrepancies in elevations of rocks caused by overlapping field inspection were noted. The higher of two elevations was shown on the manuscript in each case.

37. LANDMARKS AND AIDS

None.

38. CONTROL FOR FUTURE SURVEYS

Nine photo-hydro signals were identified by the field party and located on the manuscript. The positions of three of them were verified by theodolite cuts. See par. 49.

One hydrographic signal was located by theodolite cuts. See par. 49.

39. JUNCTIONS

Junction with surveys T-9627 to the east and T-9629 to the south have been made and are in agreement. There are no contemporary surveys to the north and west.

40. HORIZONTAL AND VERTICAL ACCURACY

Refer to Photogrammetric Plot Report.

41 - 45. Not applicable.

46. COMPARISON WITH EXISTING MAPS

Copies of survey No. T-6589 (1937), scale 1:20,000 were available for comparison. One rock and one small ledge area in the vicinity of Bluff Island were identified on the photographs from positions indicated on the previous survey. Some rocks could not be identified. There are elevations shown on the older survey which were not obtained during the 1955 season. Some conflicting elevations are also shown. No elevations were taken from the previous survey.


47. COMPARISON WITH NAUTICAL CHARTS

Chart No. 8172, scale 1:40,000, published March 1937, corrected to 9/8/52.


Items to be applied to nautical charts immediately: None.

Items to be carried forward: None.

Respectfully submitted
17 January 1956


Jack Honick
Carto. Photo. Aid

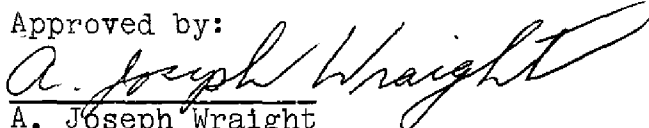
Approved and Forwarded


E. H. Kirsch,
Comdr. C&GS
Baltimore District Officer

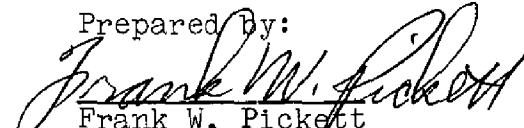
GEOGRAPHIC NAMES
FINAL NAME SHEET
PH-87 (Sumner Strait, Alaska)
T-9626

Bluff Island
Kosciusko Island
Ruins Point
Sumner Strait

Approved by:


A. Joseph Wraight
Chief Geographer

Prepared by:


Frank W. Pickett
Cartographic Technician

49. NOTES FOR THE HYDROGRAPHER

The following are the photo-hydro signals located on the manuscript. Measured discrepancies of the manuscript positions from the boat sheet positions are indicated.

Signal	LJ 1255 H-8244	LJ 1355 H-8245
INA	0.3 mm N	checks
JIT	checks	checks
KID	1.0 mm S	1.0 mm S
KIP	checks	checks
LAM*	1.0 mm SW	checks
LIZ	1.3 mm SW	1.0 mm SW
MAG*	checks	checks
OWN	3.0 mm W	1.5 mm W
POD*	0.4 mm E	1.0 mm NE

*Manuscript position verified by theodolite cuts.

Hydrographic signal NOY was located by theodolite cuts from triangulation stations located on survey T-9627. The manuscript position is 0.7 mm SE of the position on LJ 1255 and 0.5 mm SE of the position of LJ 1355.

Refer to Notes For the Hydrographer for survey T-9624 for a discussion of discrepancies similar to those listed above.

It is possible that these discrepancies would not seriously affect the hydrographic survey on the boat sheet, but it is believed that the manuscript positions should be used in the preparation of the smooth sheets.

The shoreline from RUINS, 1937 to the northeast was incorrectly transferred to the boat sheet from the preliminary survey. Apparently the office identified point was held instead of the field identified Sub. Pt. when transferring details. The office identification was made using the description of the station and was about 2 mm in error.

PHOTOGRAMMETRIC OFFICE REVIEW

T-9626

1. Projection and grids ☒ 2. Title ☒ 3. Manuscript numbers ☒ 4. Manuscript size ☒4a. Classification label ☒

CONTROL STATIONS

5. Horizontal control stations of third-order or higher accuracy ☒ 6. Recoverable horizontal stations of less than third order accuracy (topographic stations) ☒ 7. Photo hydro stations ☒ 8. Bench marks ☒
 9. Plotting of ^{Theodolite} ~~sextant~~ fixes ☒ 10. Photogrammetric plot report ☒ 11. Detail points ☒

ALONGSHORE AREAS

(Nautical Chart Data)

12. Shoreline ☒ 13. Low-water line ☒ 14. Rocks, shoals, etc. ☒ 15. Bridges ☒ 16. Aids to navigation ☒ 17. Landmarks ☒ 18. Other alongshore physical features ☒ 19. Other along shore cultural features ☒

PHYSICAL FEATURES

20. Water features ☒ 21. Natural ground cover ☒ 22. ~~Planetable contours~~ ☒ 23. ~~Stereoscopic instrument contours~~ ☒ 24. ~~Contours in general~~ ☒ 25. Spot elevations ☒ 26. ~~Other physical features~~ ☒

CULTURAL FEATURES

27. ~~Roads~~ ☒ 28. ~~Buildings~~ ☒ 29. ~~Railroads~~ ☒ 30. ~~Other cultural features~~ ☒

BOUNDARIES

31. ~~Boundary lines~~ ☒ 32. ~~Public land lines~~ ☒

MISCELLANEOUS

33. Geographic names ☒ 34. Junctions ☒ 35. Legibility of the manuscript ☒ 36. ~~Discrepancy overlay~~ ☒ 37. Descriptive Report ☒ 38. Field inspection photographs ☒ 39. Forms ☒

40. W. Glaser
Reviewer

Frank J. Taras
Supervisor Review Section or Unit

41. Remarks (see attached sheet)

FIELD COMPLETION ADDITIONS AND CORRECTIONS TO THE MANUSCRIPT

42. Additions and corrections furnished by the field completion survey have been applied to the manuscript. The manuscript is now complete except as noted under item 43.

Compiler

Supervisor

43. Remarks:

REVIEW REPORT T-9626

SHORELINE
July 24, 1968

61. GENERAL STATEMENT:

See Summary accompanying the Descriptive Report.

There is no Field Edit Report or Field Edit sheet for this survey. The shoreline was apparently checked by the hydrographer during hydrography but no correction notations could be found on either the photographs or boatsheet. * see below

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS:

Comparison was made with a copy of Registered Survey No. 6589, 1:20,000 scale made in August - September 1937. The two surveys are not in good agreement, particularly in the area of Bluff Island. The difference has been shown on the comparison print in blue.

Part of the mean high water line of this survey has been delineated with the approximate mean high water line symbol. Relief displacement, over hanging trees and long shadows prevented accurate delineation with available photography. The shoreline as delineated is believed to be adequate for nautical chart purposes and survey T-9626 should supersede survey No. 6589.

63. COMPARISON WITH MAPS OF OTHER AGENCIES:

Comparison was made with U.S.G.S. PETERSBURG (A-6), ALASKA, 1:63,360 scale quadrangle, edition of 1948. The two surveys are in good general agreement.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:

Comparison was made with copies of H-8244 and H-8245, both reviewed surveys. Due to the high stage of the tide at the time of photography and the large areas of kelp all of the rocks located by the hydrographer could not be verified photogrammetrically. All differences between the hydrographic surveys and this survey have been noted on the comparison print which is bound with this report.

* THE FIELD INSPECTION ACCOMPLISHED IN 1955 COMPRISED AN EDIT - OF THE PRELIMINARY MANUSCRIPT. NO EDIT SHEETS ~~SHEETS~~ WERE SUBMITTED. THE "INSPECTION" (EDIT) REPORT INCLUDES REFERENCE TO FIELD CHECKS BY THE HYDROGRAPHER - PAGE 10, ITEM 8. JMB

65. COMPARISON WITH NAUTICAL CHARTS:

Comparison was made with 8172, 1:40,000 scale, 5th edition of November 23, 1964. The two surveys are in good agreement.

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS:

This survey complies with instructions and meets the National Standards of Map Accuracy. * See below

Approved by:

For *J. Bull*
J. Bull, RADM, USESSA
Director, Atlantic Marine Center

Reviewed by:

Leo F. Beugnet
Leo F. Beugnet

Approved by:

Frederick J. Reaney
Chief, Photogrammetric Branch *DBB*

R H Houlton
Chief, Photogrammetry Division

Chief, Nautical Chart Division

* THERE ARE INCONSISTENCIES IN STATEMENTS MADE IN THE FIELD "INSPECTION" (EDIT)
REPORT CONCERNING THE EXTENT OF FIELD INSPECTION - ITEM 2, PARAGRAPHS 2
AND 4, AND ITEM 7, PARAGRAPH (a). SOME SHORELINE (MHW LINE) IS
SHOWN DASHED LINE.

IT IS BELIEVED THAT THE TOPOGRAPHIC INFORMATION FURNISHED THROUGH
THE COMBINED HYDRO AND TOPO SURVEYS IS ADEQUATE FOR NAUTICAL
CHARTING PURPOSES IN THE AREA.

BASIC MAP ACCURACY - HORIZONTAL CONTROL WAS FIELD IDENTIFIED
ON THE PHOTOGRAPHY; AND THE RADIAL PLOT WAS CONSIDERED
ADEQUATE FOR MAPPING TO MEET THE NATIONAL STANDARDS
OF MAP ACCURACY. *DBB*

808 Fathometer No. 102-S was used for all launch hydrography except for detached lead-line soundings on rocks and shoals. Electric sounding machine No. 144 and sheave No. 390 were used for wire soundings while obtaining bottom samples with the ship.

D. TIDE AND CURRENT STATIONS:-

A portable automatic tide gage was operated at Shipley Bay, Lat. $56^{\circ} 05.6'$, Long. $133^{\circ} 30.9'$ and all tide reducers on this survey were obtained from this gage except on 19 August. During this period Sitka tides were used with a time difference of -15 minutes and a range ratio of 1.2.

No time or range corrections were made on Shipley Bay tides for any part of the survey.

There are no current stations within the limits of this survey.

E. SMOOTH SHEET:-

Not plotted by field party.

F. CONTROL STATIONS:-

The source of control is triangulation executed by J.M.H. in 1886, G.C.J. in 1927 and 1938 and by this party in 1955.

Topographic stations on the north side of the bay west of station VAN and on Bluff Island are mostly photo-hydro stations on T-9624, T-9626 and T-9627 (1955).

Topographic stations in the inner part of the bay east of Long. $133^{\circ} 36'$ were located by plane table on graphic control sheet LJ-B-55 (Registry No.).

Topographic stations on the south side of the bay west of station FRAN were located by sextant fixes at the stations and/or sextant cuts from other shore stations. Stations INA, KIP, LIZ and OWN are also on T-9626.

Topographic station DIP was located by sextant fix and a traverse from the point of the fix (See H-8151).

Geographic positions were computed from fourth-order theodolite observations for topographic stations LAM and NOY. Fourth-order theodolite directions were observed on other topographic stations for which no positions were computed. (See Lists of Directions) *Filed with fathograms.*

No positions of stations are known to be of sub-standard accuracy.

G. SHORELINE AND TOPOGRAPHY:-

Shoreline and topographic details are from manuscripts T-9624, T-9626
T-9624 does not fall within limits of this survey

and T-9630 compiled by photogrammetric methods based on 1955 field inspection data. See also T-6589 (1937).

Three rocks on T-6589 (1937) at Lat. $56^{\circ} 04.45'$, Long. $133^{\circ} 42.1'$, Lat. $56^{\circ} 01.1'$, Long. $133^{\circ} 45.0'$, and Lat. $56^{\circ} 01.7'$, Long. $133^{\circ} 44.7'$ were not verified. These rocks probably exist as shown on T-6589 and it is recommended that they be retained. There is some doubt about the height of the first mentioned rock given as bare 3' at MLLW on T-6589. This rock was seen awash from a skiff on only one occasion, at a minus tide and with 2 to 3 foot swells. The other two rocks were not seen during the course of this survey.

(3) retained on Smooth Sheet.
(2) shown on S/S - GRT 7-1-64

Kelp areas defined by the hydrography should be given preference over those shown on the manuscripts.

Shoreline indicated by dashed line on the manuscripts is partially obscured by trees and shadows on photographs. However, it is essentially correct for charting as shown.

The low-water line was not defined by soundings except in limited areas of flat sand beach. Steep foreshore or a fringe of heavy kelp along the shoreline prevented sounding in to the low-water line.

All stations outside the high-water line are on rocks or islets.

Shoreline on the boat sheet is from preliminary manuscripts T-9626, T-9629 and T-9630 compiled without projections and was transferred to the sheet to fit photo identified control.

1. SOUNDINGS:-

All soundings on sounding lines were measured in fathoms with 808 fathometers. Wire soundings were measured with sounding machine while obtaining bottom samples with the ship.

All sounding was routine. No unusual methods were used and no unusual corrections were applied.

Bar checks were taken by the launch when weather conditions permitted to a depth of 10 fathoms. No bar checks were taken by the ship. On launch hydrography bar checks were used for correction of soundings and entered in the sounding records as part of a combined phase-draft correction. A similar correction was obtained for the ship using the depth of the transducer units below the surface. This correction is also entered in the sounding records as part of a combined phase-draft correction.

On the launch the fathometer initial was set at zero and on the ship at 1.0 fm. Any variation from these settings was entered in the sounding records as an index correction.

Fathometer phase corrections were determined by comparisons on adjacent scales on readings made in air. These comparisons were made at

203 Fathometer No. 75 was used for all ship hydrography except for detached wire soundings on shoals and while obtaining bottom samples. Electric sounding machine No. 144 and sheave No. 390 were used for wire soundings.

Inshore hydrography was done with the launch approximately to the 20 ft. curve. Offshore hydrography was done with the ship.

A fifth or E scale on Fathometer No. 75 permitted sounding to a depth of 195 fms.

2. TIDE AND CURRENT STATIONS:-

off limits of H-8244
A portable automatic tide gage was operated at Pole Anchorage, Lat. $55^{\circ} 57.0'$, Long. $133^{\circ} 48.5'$ and all tide reducers on this survey were obtained from this gage except on 19 August and 24 August. On 19 August Sitka tides were used with a time difference of -15 minutes and a range ratio of 1.2. On 24 August Shipley Bay tides were used without time or range corrections.

No time or range corrections were made on Pole Anchorage tides for any part of this survey.

One current station was occupied west of Ruins Point. The position of this station is not available at the time of writing this report.

3. SMOOTH SHEET:-

Not plotted by field party. (Seattle P.O.)

4. CONTROL STATIONS:-

The source of control is triangulation executed by J.M.H. in 1886 and G.C.J. in 1937.

Topographic stations are mostly photo-hydro stations located on T-9624, T-9626, T-9629 and T-9630 (1955).

Topographic stations ARC, BUR, INA, JUG, KIP, MAL, PAR and SLY were located by sextant fix at the station and/or sextant cuts from other shore stations. (See Processlog Office Notes for signed SLY)

A fourth-order geographic position was computed for topographic station LAN (see H-8245).

No positions of stations are known to be of sub-standard accuracy.

5. SHORELINE AND TOPOGRAPHY:-

Shoreline and topographic details are from manuscripts T-9626, T-9629

DESC. REPORT
H-8244

and T-9627 compiled by photogrammetric methods based on 1955 field inspection data. There is a small amount of shoreline and detached rocks on graphic control sheet LJ-B-55* Location of some offshore rocks were duplicated by the hydrographer and others were located which are not on the manuscripts. Kelp areas defined by the hydrography should be given preference over those indicated on the manuscripts. Shoreline indicated by dashed line on the manuscripts is partially obscured by trees and shadows on photographs. It is essentially correct for charting as shown.
* *pertinent data applied to smooth sheet - marked for destruction.*

See TP6
Review

The low-water line was not defined by soundings except in limited areas of tide flats in small bays. A fringe of heavy kelp along shore and steep foreshore prevented sounding in to the low-water line.

All stations outside the high water line are on rocks and islets.

H. SOUNDINGS:-

All soundings on sounding lines were measured in fathoms with 808 fathometer No. 102-S. Soundings on some rocks and shoals were measured with a hand lead. Wire soundings were measured while obtaining bottom samples with the ship.

All sounding was routine. No unusual methods were used and no unusual corrections were applied.

Bar checks were taken daily when weather permitted to a depth of 10 fathoms. Bar checks were used for correction of soundings and are entered in the sounding records as part of a combined phase-draft correction.

The fathometer initial was set on zero and any variation from this setting was entered in the sounding records as an index correction.

Fathometer phase corrections were determined by readings made in air immediately prior to the field season and later verified in the field by sounding. Phasing heads were not changed during the season and phase corrections are entered in the sounding records as part of a combined phase-draft correction.

I. CONTROL OF HYDROGRAPHY:-

All hydrography was controlled by visual sextant fixes on shore stations. No unusual methods were used.

J. ADEQUACY OF SURVEY:-

The survey is considered complete and adequate to supersede all prior surveys of the area.

All parts of the survey are equally reliable and comply with the Project Instructions and the Hydrographic Manual.

Review Report

29

H-8244 - 3

Revised
11-2-51

2. The kelp (charted) shown in the vicinity of lat. $56^{\circ}01.5'$, long. $133^{\circ}46.2'$, on H-1754 (1886), is not shown on the present survey. The kelp falls in present depths of 60-80 fms. and is considered to be non-existent. The kelp should be deleted from the chart.
3. The 3 sunken rocks (charted) shown in the vicinity of lat. $56^{\circ}04.6'$, long. $133^{\circ}42.1'$, on H-1754 (1886), where they symbolize a foul area, should be deleted from the chart. The foul area is considered to be adequately developed on the present survey for charting purposes.
4. The rock awash (charted) in lat. $56^{\circ}04.11'$, long. $133^{\circ}42.07'$, is believed to originate with H-1754 (1886) where it is shown as a sunken rock and is a typical symbolization for shoal areas which were not sounded on that survey. The feature falls in depths of 1 fm. on the present survey. The sunken rock symbol should be deleted from the chart and in its stead the 1 fm. depth should be charted.

A number of bottom characteristics have been carried forward from the prior surveys. With these additions together with the rocks and ledges carried forward from T-6589 (1937) referred to in item 1 of this review, the present survey is adequate to supersede the prior surveys within the common area.

B. Wire Drag Surveys

H-3791 WD (1915), 1:20,000

H-3916 WD (1916), 1:20,000

There are no conflicts between the present survey soundings and the effective wire drag depths.

6. Comparison with Chart 8172 (Latest print date 9/1/58)
Chart 8173 (Latest print date 10/22/51)
Chart 8201 (Latest print date 7/27/59)

A. Hydrography

The charted hydrography originates principally with prior surveys previously discussed which needs no further consideration supplemented by soundings in the boat sheet (Bp 52871) of the present survey.

Review
Report
H-8244

b
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Addi

Chief

Chief

H-8244 - 4

The present survey is adequate to supersede the charted hydrographic information within the common area. (The charted shoreline originates with T-6589 (1937) and is in marked disagreement in several places with the shoreline from unreviewed photogrammetric surveys shown on the present survey).

B. Aids to Navigation

There are no floating aids to navigation within the area of the present survey.

7. Condition of Survey

- a. The sounding records and Descriptive Report are complete and comprehensive.
- b. The smooth plotting was accurately done.

8. Compliance with Project Instructions

The survey adequately complies with the project instructions.

9. Additional Field Work Recommended

The survey is considered basic and no additional field work is recommended.

Examined and Approved:

Max Skutumpah
Chief, Nautical Chart Branch

Thomas B. Loney
Chief, Division of Charts

Louis F. Woodward
Chief, Hydrography Branch

J. Bowie
Chief, Division of Coastal Surveys

H-8245 - 3

REVIEW
REPORT
COMPLY
Chart
8172

The following reefs and rocks transferred to the smooth sheet of the present survey from the advance manuscript of air-photographic survey T-9627 (1953-55) have not been charted:

<u>Object</u>	<u>Location</u> <u>Latitude</u>	<u>Longitude</u>
Reef	56°04.73'	133°32.71'
Bare Rk	56°04.71'	133°32.63'
Reef	56°04.5'	133°32.1'
Rock awash	56°04.51'	133°33.67'
2 Bare Rks	56°05.0'	133°39.63'

The reef shown on the present survey in lat. 56°04.54', long. 133°30.83' originates with the boat sheet. The reef has not been charted.

The following bare rocks charted from incomplete air-photographic survey T-9627 (1937) were revised on the advance manuscript of this survey as indicated:

<u>Latitude</u>	<u>Location</u> <u>Longitude</u>	<u>Revised to:</u>
56°05.42'	133°30.22'	Rk awash
56°05.53'	133°30.75'	Rk awash
56°05.67'	133°30.89'	Rk awash
56°06.38'	133°37.75'	Reef
56°06.45'	133°38.08'	Reef
56°06.25'	133°37.50'	Reef

The chart should be corrected to comply with the above revisions.

The following charted rocks originating with incomplete air-photographic survey T-9627 (1953-55) are not shown on the advance manuscript of T-9627 or on the present survey. These rocks are considered discredited by hydrography on the present survey and should, therefore, be deleted from the chart.

<u>Object</u>	<u>Location</u> <u>Latitude</u>	<u>Longitude</u>
Rock awash	56°05.15'	133°38.50'
Bare Rk	56°05.65'	133°30.86'
2 rocks awash	56°06.60'	133°38.10'
Rock awash	56°05.12'	133°38.70'

H-8245 - 4

REVIEW
REPORT

The sunken rock charted in lat. $56^{\circ}04.55'$, long. $133^{\circ}33.67'$, originates with a zero depth on the boat sheet of the present survey (Bp 52872). This depth was revised to 0.6 fm. during verification and review of the present survey. The sunken rock symbol should be deleted from the chart and 0.6 fm. charted instead.

The small island charted in lat. $56^{\circ}06.34'$, long. $133^{\circ}37.55'$, from incomplete air-photographic survey T-9627 (1953-55) is shown on the advance manuscript of T-9627 as part of the larger island to the westward. The chart should be revised to agree with the advance manuscript.

The land spur charted in lat. $56^{\circ}04.95'$, long. $133^{\circ}36.27'$ from incomplete air-photographic survey T-9627 (1953-55) was revised on the advance manuscript of survey T-9627 to a detached island. The chart should be revised to agree with the advance manuscript.

The present survey is adequate to supersede the charted hydrography within the common area.

7. Condition of Survey

- A. The sounding records and Descriptive Report are complete and comprehensive.
- B. The smooth plotting was accurately done, except that a number of soundings at odd intervals were added to the sounding volumes from the fathograms in order to better delineate the bottom.

8. Compliance with Project Instructions

The survey adequately complies with the Project Instructions.

9. Additional Field Work Recommended

The survey is considered basic and no additional field work is recommended.

Examined and Approved:

Chief,
Nautical Chart Division

10/27/60

Projects Officer,
Operations Division

Assistant Director
Office of Cartography

Assistant Director
Office of Oceanography