

Original

9625

9625

Form 504	
U. S. DEPARTMENT OF COMMERCE	
COAST AND GEODETIC SURVEY	
DESCRIPTIVE REPORT	
Type of Survey	Shoreline (Photogrammetric)
Field No. PH-87	Office No. T-9625
LOCALITY	
State	ALASKA
General locality	El Capitan Passage
Locality	Shakan Strait and Dry Pass
1953 1955 1957	
CHIEF OF PARTY	
E. W. Richard, Chief of Field Party	
W. F. Deane, Baltimore District Officer	
LIBRARY & ARCHIVES	
DATE	

COMM-DC 61300

DESCRIPTIVE REPORT - DATA RECORD

T-9625

Project No. (II): Ph-87

Quadrangle Name (IV):

Field Office (II): Ship LESTER JONES
Ship HODGSON

Chief of Party: G. A. Nelson
E. W. Richards

Photogrammetric Office (III): Baltimore, Maryland

Officer-in-Charge: W. F. Deane

Instructions dated (II) (III):
Field: 3 June 1953 Office: 17 Dec. 1953
28 Dec. 1953 12 Nov. 1954
23 Dec. 1954 6 Sept. 1955
25 Jan. 1955 15 July 1957
21 Nov. 1955
11 Jan. 1957

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): LONE, 1922

Lat.: 56° 08' 27.646 (855.1m)

Long.: 133° 29' 22.069" (381.17)

~~Unadjusted~~
Unadjusted

Plane Coordinates (IV):

State: Alaska

Zone: 8

Y=

X=

Roman numerals indicate whether the item is to be entered by (I) 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

RECOVERY, ESTABLISHMENT AND IDENTIFICATION OF CONTROL - 1954
Field Inspection by (II): P. A. Stark and C. W. Clark Date: July 1955
See below * J. P. Randall and M. D. Christensen April 1957

Planetary contouring by (II):

Date:

Completion Surveys by (II): * EDIT AND CONTROL OPERATIONS

Date:

Mean High Water Location (III) (State date and method of location): 1953, date of photography;
Supplemented by field inspection.

SHAKEN STRAIT & PART OF EL CAPITAN PASSAGE { 1953 PHOTOGRAPHY SUPPLEMENTED BY 1955 FIELD EDIT
DEVILFISH BAY AND PART OF EL CAPITAN PASSAGE { 1953 PHOTOGRAPHY SUPPLEMENTED BY 1957 FIELD EDIT
Projection and Grids ruled by (IV): A. Riley

Date: 1/5/54

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

Date: 1/11/54

Control plotted by (III): J. Cregan

Date: 9/21/55

Control checked by (III): A. Queen

Date: 9/26/55

Radial Plot of Stereoscopic

Contour Extension by (III):

E. L. Williams

Date: 10/31/55

Planimetry

Date:

Stereoscopic Instrument compilation (III):

Contours

Date:

Manuscript delineated by (III): J. Honick
J. Council
R. Whitson

Date: 8/9/57

Photogrammetric Office Review by (III): R. Glaser

Date: 8/14/57

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

Date:

DESCRIPTIVE REPORT - DATA RECORD

3

Camera (kind or source) (III): USC&GS nine-lens

Number	Date	PHOTOGRAPHS (III) Time	Scale	Stage of Tide
41606 thru 41608	8/22/53	1238	1:10,000	10.0 above MLLW
41630 and 41631	"	1253	"	9.8 " "
41655 and 41656				

Tide (III)
From Predicted Tables

Reference Station: Sitka
Subordinate Station: Shakan, Kosciusko Island
Subordinate Station: ~~Cyrus Cove, Sea Otter Sound~~

Ratio of Ranges	Mean Range	Spring Range
	7.7	9.9
1.3	9.7	11.7
	8.8	10.9

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

Final Drafting by (IV):

Date:

Drafting verified for reproduction by (IV):

Date:

Proof Edit by (IV):

Date:

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

Shoreline (More than 200 meters to opposite shore) (III): 27 mi.

Shoreline (Less than 200 meters to opposite shore) (III): 3 mi.

Control Leveling - Miles (II):

Number of Triangulation Stations searched for (II): 12 Recovered: 9 Identified: 2*

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

Number of Recoverable Photo Stations established (III): ** 3 Recovered: 1 (in 1957)

Number of Temporary Photo Hydro Stations established (III): 14 (on manuscript)

Remarks:

* During 1955 season: Established - 6 Identified: 3

** In addition, TAINE, RM established as recoverable topo station in 1955 after TAINE, 1922 was lost as triangulation.

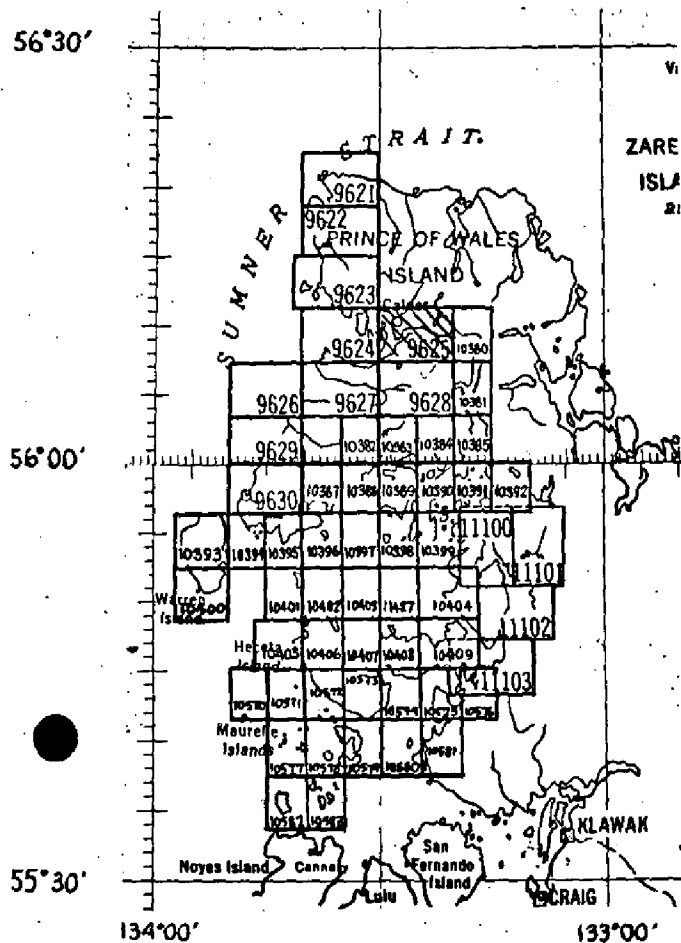
*3 topo stations established in 1957
1 station recovered " "*

T-9625

COMPILATION RECORD	COMPLETION DATE	REMARKS
PRELIMINARY MANUSCRIPT COMPILED	1954	FURNISHED FOR EDIT
* Compiled	August 1957	ADVANCE
Final Review	June 1968	
* ADVANCE MANUSCRIPT COMPILED	1955	FURNISHED FOR HYDRO -SUPERSEDED (REFER TO PAGE 6)

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	8	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

SUMMARY TO ACCOMPANY
DESCRIPTIVE REPORT T-9625

Shoreline survey T-9625 is one of 58 similar surveys in Project PH-87. It covers a part of Shakan Strait and El Capitan Passage in S. E. Alaska. The primary purpose of the survey was to provide new shoreline for nautical charts and photo-hydro support data for hydrographic surveys.

Field work preceding compilation consisted of recovery and/or establishment and identification of horizontal control and shoreline inspection. In 1957 it was found that part of the shoreline in El Capitan Passage was erroneously compiled due to faulty identification and mis-interpretation of the photography. Two stations were reidentified and one additional station recovered and identified at this time. The survey was returned to the compilation office and the area in error was re-compiled. ** See below*

Compilation was at 1:10,000 scale by graphic methods using the 1:10,000 scale nine-lens photographs of August 1953. A cronaflex copy of the manuscript, blue line tracing, ozalid prints and specially prepared photographs were provided for preparation of the hydrographer's boat sheet, locating 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 furnished for record and registry.

* A PRELIMINARY MANUSCRIPT WAS COMPILED IN 1954. A FIELD PARTY EDITED THE PRELIMINARY MANUSCRIPT, AND RECOVERED, ESTABLISHED, AND IDENTIFIED CONTROL FOR A FINAL RADIAL PLOT IN 1955. THE PLOT WAS ASSEMBLED IN 1955 AND ADVANCE MANUSCRIPT COMPILED FOR HYDRO SUPPORT. DURING 1957 HYDROGRAPHY, THE MANUSCRIPT ERRORS, AS STATED ABOVE, WERE FOUND - IN THE AREAS OF DEVILFISH BAY AND PART OF EL CAPITAN PASSAGE. IN ADDITION TO THE CONTROL REIDENTIFICATION (PARAGRAPH 2 ABOVE) THE MAP WAS REEDITED - IN PART.

A NEW RADIAL PLOT WAS ASSEMBLED IN 1957 AND ADVANCE MANUSCRIPTS COMPILED. THE PLOT REPORT (1957) IS INCLUDED IN THE DESCRIPTIVE REPORT FOR T-10381. ONLY A PART OF THE MANUSCRIPT REQUIRED ACTUAL RECOMPILATION, AS REFLECTED IN THE COMPILATION REPORT, & PAGE 27A (A PART WAS USED IN 1955 HYDROGRAPHY).

THE ADVANCE MANUSCRIPT COMPILED IN 1957 HAS BEEN APPLIED TO CONTEMPORARY HYDROGRAPHIC SURVEYS - THE TOPO AND HYDRO SURVEYS ARE IN AGREEMENT. THE "DIFFERENCES" NOTED ON THE COMPARISON PRINT CONCERN ONLY ROCKS SHOWN ON THE HYDRO SURVEY THAT ARE NOT VISIBLE ON THE PHOTOGRAPHY. JDA

* EDIT

FIELD ~~INSPECTION~~ REPORT (in part)

For

MAPS T-9623 to T-9630

(1955)

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.

* WORK COMPRISED AN EDIT OF THE PRELIMINARY MANUSCRIPT.
REFER TO PAGE 14 FOR ADDITIONAL FIELD WORK
ACCOMPLISHED IN 1957

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	TAINE	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	ONAU 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
HALI 1937	A	41315	SCRAB 1937	T-9630	41332
HAMILTON ID. DAY- BEACON, 1954	T-9624	41510	SHAKAN STRAIT		
HIP (4th order)	T-9624	41511	DAYBEACON, 1955	T-9624	41541
HOLBROOK 1903	C-	41515	SHAKE 1955	T-9624	41542
INNER 1955	T-9623	41565	SICKLE 1938-1955	T-9627	41512
ISLE 1922	T-9624	41540	SLEEPY 1938-1955	T-9627	41512
LEDGE 1922	T-9625	41541	STATE 1922	T-9624	41510
LICHEN 2 1937	W. of A	41315	STRAW 1903	A	41327
LONE 1922	T-9625	41606	TWIST 1955	T-9624	41543
MIDDLE 1955	T-9624	41608	UPPER 1955	T-9625	41609
			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
Key	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>
Gaf	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

FIELD INSPECTION REPORT

EL CAPITAN PASSAGE

NO OTHER SECTION APPLICABLE.

3. HORIZONTAL CONTROL:

All triangulation stations on Manuscripts 10380, 10381, 10385, 10390, and 10391, for which photographic identification was required, were recovered and pricked on photographs; along with others that were not specified.

Stations identified were as follows:

POINT 1922	LOR 1922	SARKAR 1953
GRASS 1922	EL 1922	BROCKMAN 1922
LAST 1922	CAP 1922	NAT 1922
FISH 1922	TAN 1922	EGG 2 1922
BAY 1922	DEWEY 1922	WHITE 1922
DEVIL 1922	BURNT IS. LIGHT 1953	

14. SUPPLEMENTAL DATA:

Forwarded to the Director:

1. Control Station Identification Cards forwarded 16 October via transmitting letter HDG-56-13.
2. Nine Lens Office Photographs forwarded 16 October via transmitting letter HDG-56-13.
3. Nine Lens Field Photographs forwarded 22 October via Transmitting letter HDG-56-14.
4. Blue-line Tracings and Blackline Impressions forwarded 23 October via transmitting letter HDG-56-14.

Approved and forwarded:

Robert A. Earle
Robert A. Earle,
CDR, USC&GS
Comdg., Ship HODGSON

Respectfully submitted,

James P. Randall
James P. Randall,
Lt.(jg), USC&GS

FIELD ~~INSPECTION~~ REPORT

~~*~~ EDIT

FOR

DEVILFISH BAY AND PART
OF EL CAPITAN PASSAGE

MANUSCRIPTS NO'D.

T-9625

T-9628

T-10380

T-10381

(1957)

REFER TO PAGE 7 OF THIS
DESCRIPTIVE REPORT CON-
CERNING FIELD WORK AC-
COMPLISHED IN 1955

2. Areal Field Inspection

This report covers the northern third of El Capitan Passage from Fontaine Island, Shakan Strait, east and south to and including Devilfish Bay.

Rock outcroppings are, in general, metamorphic limestones and shales.

A black scale covers all alongshore outcroppings, and boulders, and shows as a distinctive black line, on the photographs. The bottom of this line very closely approximates the mean high water line.

At the western entrance to El Capitan Passage, on the islet ENE of station PASS 1922, is a small building in fair condition. Its origin and use are unknown.

On the next island to the north, location of photo-hydro station "DAD", is a cemetery which was most probably used by the abandoned quarry that lies three fourths of a mile to the northeast.

In the shallow bight immediately west and south of Dry Pass, are the ruins of a former mining operation.

The ruins of a mining operation located on the northwest side of El Capitan Passage, at the "dog leg", and symbolized on Chart 8172 was denoted.

Densities and tones were not, in general, inspected inshore of the high-water line. It was noted however that alder, show as a low (10 to 15 feet) dark, globular color tone paralleling the beach in front of the lighter conifers.

3. Horizontal Control

(d - f) Station POINT 1922, listed as not positively identified in 1956 was reidentified.

Station BAY 1922-57, which was misidentified in 1956, was reidentified.

Station LAST 1922, was recovered and identified.

4 & 5.- Inapplicable

* THE WORK COMPRISED AN EDIT OF AN "ADVANCE" COPY OF
T-9625 (THE ADVANCE COPY WAS SUPERSEDED IN PART
AS THE RESULT OF THIS WORK - REFER TO PAGE 6 OF
THIS DESCRIPTIVE REPORT)

-2- -8-
15

6. Woodland Cover

All land areas not covered by storm high waters were densely wooded with conifers and underbrush with the exception of muskegs, small logged areas, and the higher mountains.

7. Shoreline and Alongshore Features

The shoreline was inspected from the beach at all photo-hydro signal locations and from the boat in all other areas.

- a. The office interpretation of the mean high water line was, in general, quite accurate, even in the heavily shadowed areas.
- b. In the extensive areas of shadow along the southern shores of El Capitan Passage and Devilfish Bay, sextant fixes were taken and recorded on the back of the photographs. A close approximation of the mean high water line was drawn on the photographs to better enable the office personnel to determine the shape of the shoreline.

In the smaller shadowed areas the shoreline was readily discernable and was delineated directly on the photographs.

The shoreline, in the deltaic flats, east of Dry Pass, was identified as called for in the Preliminary Descriptive Report.

The error in the previous field identification of the mean high water line in Shakan Straits, was noted and corrected.

- b. The low water line corresponds closely with the darker color tone at the outer edge of alongshore and offshore shoal features.
 - c. The foreshore consists of rock outcrops and boulders, with the exception of the deltaic muds and gravels at the mouths of the larger streams.
- There were no sandy areas of any extent.
- d. There were no cliffs or bluffs of note.
 - e. The log boom symbolized on Chart 8172 was not discernable on the photographs. It was located by sextant fixes on photo-hydro signals and plotted on the manuscript T-9625. The angles were recorded on the reverse side of the photograph.

8. Offshore Features

All apparent offshore features were visited. All shoal and foul areas were indicated on the photographs.

Visible rocks were indicated and their heights or depths, times and dates were noted.

All heights were estimated and depths measured.

Within the area covered by this report, there were no kelp patches.

All rocks not visible on the photographs were located by sextant angles to photo-hydro signals. The fixes were recorded on the back of the photographs.

9. Landmarks and Aids

There were no landmarks of importance within this area.

The one fixed and five floating aids covered by this report are:

<u>NAME</u>	<u>METHOD OF LOCATION</u>
Dry Pass Buoy 1	Photo & Sextant
Dry Pass Buoy 2	Photo only
Dry Pass Buoy 5	Photo and Sextant
Dry Pass Daybeacon 7	Photo only (BEAK 1957)
Dry Pass Buoy 9	Photo and Sextant

At the time of this survey, Dry Pass Buoy 2 was missing. Notification has since been received that it has been replaced on station.

10. Inapplicable

11. Other Control

All photo-control was recorded on Control Station Identification Cards.

Many marked hydrographic stations from the 1922 survey were recovered and located on the photographs, thereby, exceeding the required spacing for recoverable topographic stations.

No effort was made to recover these marked stations but where the present hydrographic control requirements coincided with the previous requirements, then they were located on the photographs, and topographic recovery cards submitted.

West of Dry Pass on the northern shores of Kosciusko Island two unstamped standard Coast and Geodetic Survey bench marks were recovered. No reference to their existence could be found in the project instructions. The westernmost of the two disks was located and called PILL 1957.

The following is a list of recoverable topographic stations:

<u>NAME</u>	<u>MANUSCRIPT</u>	<u>PHOTO</u>
BEAK 1957	T-9625	41631
EV 1922	"	41655
PILL 1957	"	41631
LIPP 1957	"	41637
SOL 1922	T-10380	41675
OFF 1922	"	"
WAG 1922	"	41676
BOW 1922	"	41674
STONE 1922	T-10381	41653

12. Inapplicable

13. Geographic Names

Geographic names will be covered in a separate report.

14. Special Reports and Supplemental Data

Forwarded to the Director:

1. Nine lens office and field photographs via transmitting letter 8 June 1957.
2. Blue-line Tracings and Blackline Impressions, via transmitting letter 8 June 1957.
3. Hydrographic Sheet - Field No. HO-1157, 6 June 1957
4. Tidal data via transmittal letter 11 May 1957.
5. Control Station Identification Cards for all control, via transmittal letter 17 June 1957.
6. Description of Recoverable Topographic Stations via transmittal letter 17 June 1957.

To be forwarded:

1. Triangulation Recovery Cards.
2. Geographic Names Report.
3. Coast Pilot Notes.

Respectfully submitted,

James P. Randall
James P. Randall,
LTJG, C&GS

Approved and forwarded :

E. W. Richards

E. W. Richards,
Lt., C&GS
Comdg., Ship HODGSON

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

MAP T. 9625

PROJECT NO. Ph-87

SCALE OF MAP 1:10,000

SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR ψ -COORDINATE LONGITUDE OR χ -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		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)
			°	'			FORWARD	(BACK)	
FLAT, 1922	G 609	N.A.	56	11	24.422		755.4	(1100.4)	
	P. 310	1927	133	24	02.785		48.0	(986.8)	
NOR, 1922	G 609	"	56	09	05.964		184.5	(1671.3)	
	P. 311	"	133	28	09.869		170.4	(865.5)	
MIL, 1922	G 609	"	56	07	31.712		980.8	(874.9)	
	P. 318	"	133	29	55.382		956.8	(79.8)	
LEDGE, 1922	"	"	56	08	19.020		588.3	(1267.5)	
	"	"	133	29	33.669		581.5	(454.7)	
WEST, 1922	"	"	56	08	14.117		436.6	(1419.1)	
	"	"	133	28	43.826		756.9	(279.3)	
LONE, 1922	"	"	56	08	27.646		855.1	(1000.7)	
	"	"	133	29	22.069		381.1	(655.0)	
EAST A, 1922	G 609	"	56	08	16.549		511.8	(1343.9)	
	P. 319	"	133	28	37.691		650.9	(385.3)	
CREEK, 1922	"	"	56	08	54.333		1680.5	(175.3)	
	"	"	133	28	57.435		991.7	(444.3)	
STUMP, 1922	"	"	56	08	31.684		980.0	(875.8)	
	"	"	133	27	26.183		452.1	(584.0)	
PASS, 1922	"	"	56	09	08.339		257.9	(1597.8)	
	"	"	133	27	27.124		468.3	(567.6)	
Sub. Ft. LONE, 1922	Comp.	"	56	08			859.2	(966.6)	
	"	"	133	29			379.7	(656.4)	
QUARRY, 1955	P2 Field	"	56	10	14.337		443.4	(1412.4)	
	Comp.	"	133	29	15.159		261.6	(773.7)	

1 FT. = 3048006 METER

COMPUTED BY B. Kurs

DATE 9/20/55

CHECKED BY J. Steinberg

DATE 9/20/55

COMM. DC. 5784

SCALE FACTOR

1 FT = 3048006 METER	DATE	9/20/55	CHECKED BY	J. Steinberg	DATE	9/20/55	COMM-DC-5784
COMPUTED BY	B. Kurs						

13
20

PHOTOGRAMMETRIC PLOT REPORT
PROJECT 6087

Surveys T-9624 thru T-9628

ANOTHER PLOT WAS ASSEMBLED FOR T-9625 - REFER TO THE DESCRIPTIVE REPORT FOR T-10381 FOR THE REPORT, AND TO PAGE 6 OF THIS DESCRIPTIVE REPORT.

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.

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.

22

-3-

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

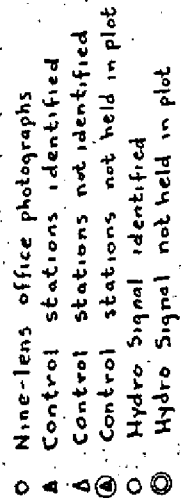
The photographic coverage and definition of photographs used in the plot were good. However, the office prints were in poor condition as the result of being used in a previous plot of the same area, as well as in preliminary compilation and in two field seasons with the hydrographic party. It is believed 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 items 22 & 23
JLB

Respectfully submitted
22 November 1955

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

1. STATION 15. L.H., 1954
2. SHAKAN, 1886
3. STATE, 1922
4. HIP, 1955
5. ROS, 1955
6. MILTON, 1955
7. LIM, 1915
8. END, 1922
9. HAMILTON 15. DAY BN, 1954
10. LOG A, 1912
11. REEF, 1922
12. ISLE, 1922
13. HAM, 1922
14. SHAKAN STRAIT DAY BN, 1955
15. TRIPLE, 1922
16. QUARRY, 1955
17. MOR, 1922
- TAINE, 1922
- PASS, 1922
18. CREEK, 1922
19. LONE, 1922
- LEDGE, 1922
20. EAST A, 1922
- WEST, 1922
- MIL, 1922
21. VENT, 1937
22. PAUL, 1937
23. PERK, 1937
24. GRIN, 1937
25. SHIP, 1937
26. PLAY, 1938
- SLEEPY, 1938-55



COMPILATION REPORT
T-9625

Field Inspection Reports:

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.
(HORIZONTAL CONTROL RECOVERY AND IDENTIFICATION)
2. Field ^{EDIT} Inspection Report, Maps T-9623 thru T-9630, Combined Operations - USC&GS Ship LESTER JONES, Project 1347 (PH-87) submitted by P. A. Stark (~~part of Descriptive Report, T-9624~~).
Bound with this Report
3. Field ^{EDIT} Inspection Report, Maps T-9625, T-9628, T-10380 and T-10381, USC&GS Ship HODGSON, submitted by E. W. Richards in 1957 (~~Part of Descriptive Report, T-10380 and T-10381~~).
Bound with this Report

Photogrammetric Plot Report for ~~_____~~ ^{this} is a part of Descriptive Report, ~~T-9624~~.
A SHAKEN STRAIT

RADIAL PLOT REPORT NO. 2 IS INCLUDED IN THE DESCRIPTIVE REPORT FOR T-10381.

31. DELINEATION

This manuscript was delineated by graphic methods. In Shakan Strait, parts of the shoreline was obscured by shadow and relief displacement of trees and was shown with a broken line. In El Capitan Passage, the shoreline, which had been delineated by office interpretation prior to hydrography, was corrected by field inspection on photographs during hydrography and by sextant fixes in areas where there were deep shadows.
** see below*

32. CONTROL

Refer to Photogrammetric Plot Report.

33. SUPPLEMENTAL DATA

Copies of boat sheets LJ-1155 and HO-1157 were available for purposes of comparison.

Graphic control sheet LJ-A-55 became available after the Shakan Strait area was compiled. A comparison was made and indefinite shoreline was adjusted at several signals.

34. CONTOURS AND DRAINAGE

Contours: Inapplicable.

Drainage: No comment.

** ONLY VERY LIMITED AREAS ARE SHOWN WITH A BROKEN LINE. THE SHORELINE IS ADEQUATE FOR CHARTING IN THIS AREA.*

100

35. SHORELINE AND ALONGSHORE DETAILS

Shoreline inspection was adequate in Shakan Strait and was exceptionally complete in El Capitan Passage. The low water lines and ledge areas are based on data furnished by the field party.

No information was furnished to delineate the temporary log boom SE of Fontaine Island shown on boat sheet LJ-1155.

In the abandoned village of Shakan, only one ruin was identified and no buildings could be interpreted in the office. Two charted buildings at Calder could not be positively identified.

There was no information to delineate the cemetery on an island at entrance to El Capitan Passage (noted in 1957 field inspection report).

The field inspector's notes "point attached at MHW" and "islet detached at MHW" in cases of questionable areas were of great assistance to the compiler.

36. OFFSHORE DETAILS

No comment.

37. LANDMARKS AND AIDS

Form 567 is being submitted for one non-floating aid to navigation.

38. CONTROL FOR FUTURE SURVEYS

Forms 524 are being submitted for four recoverable topographic stations established in 1957. In accordance with the recovery note for TAINE, 1922; the reference mark was shown as a recoverable topographic station (see list under item 49).

Photo-hydro signals were plotted on a blackline impression by the hydrographic party. In the area where "jumps" in fixes were reported, all signals east of longitude 133° 22' to the east limits of the survey were replotted on the manuscript. Discrepancies are noted in item 49.

39. JUNCTIONS

Junctions have been made with survey T-9624 to the west, T-9628 to the south and T-10380 to the east. There is no contemporary survey to the north.

40. HORIZONTAL AND VERTICAL ACCURACY

Refer to Photogrammetric Plot Report.

41 - 45 Inapplicable.

46. COMPARISON WITH EXISTING MAPS

None available.

47. COMPARISON WITH NAUTICAL CHARTS

Chart 8172, scale 1:40,000, 3rd Edition, 19 March 1956.

Items to be applied to nautical charts immediately:
None

Items to be Carried Forward:

Charted buildings could not be positively identified on the photographs at Shakan and Calder. Only ruins of one building at Shakan was field identified and was shown on the manuscript.

Respectfully submitted
15 August 1957

Frank J. Tarcza
Frank J. Tarcza
Super. Carto. (Photo.)

Approved and forwarded

William F. Deane
William F. Deane,
CDR C&GS
Baltimore District Officer

GEOGRAPHIC NAMES
FINAL NAME SHEET
PH-87 (Sumner Strait, Alaska)
T-9625

Calder
Dry Pass
El Capitan Passage
Fontaine Island
Hamilton Island
Kosciusko Island
Marble Creek
Prince of Wales Island
Shakan
Shakan Strait

Approved by:

A. Joseph Wraight
A. Joseph Wraight
Chief, Geographer

Prepared by:

Frank W. Pickett
Frank W. Pickett
Cartographic Technician

Project Ph-87
T-9625

49. NOTES TO HYDROGRAPHER

1955 Hydrography:

Graphic control sheet LJ-A-55 was compared with the manuscript. The following discrepancy requires attention:

At signal HOD, the position falls 2 mm east of the shoreline on the manuscript.

The boat sheet indicates this signal to be on the shoreline. The cut from RUG is suspected.

1957 Hydrography:

In plotting the sextant fixes to locate the ends of a log boom (near hydro signal IDA, photograph 41655) the angles to signal DAY would not hold. Results in good agreement with the boat sheet were obtained omitting the angles to DAY.

The following recoverable topographic stations appear on the manuscript:

TAINE RM 1922	LIPP 1957
BEAK (Dry Pass Daybn 7) 1957	FILL 1957
EV. (1922) 1957	

In the area where "jumps" in hydrography were reported (Longitude 133° 22' to west limits of manuscript), thirteen signals were replotted in compilation office. The new positions of the following signals were transferred to the blackline impression and shown in green:

ACE	CAT	EAR	IDA	NIL
BAH	DAW	EBB	JAP	
CAR	DAY	FLY	MAN	

Discrepancies serious enough to cause "jumps" were found at four of the signals:

At BAH, the original office location of the island was in error by 1 mm. This was probably the major cause of the "jump".

ACE and NIL were in error by 0.7 mm and 0.6 mm. These appear to be improper adjustments for scale of photographs in the field.

At CAR, the distance to signal was given in feet and meters but the conversion does not check. Two positions were plotted and shown for this signal.

Refer to page 36
item E
SH 6

8-15-57

Form T-2

28

PHOTOGRAMMETRIC OFFICE REVIEW

T-9625

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

CONTROL STATIONS

4a. Classification label ☒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 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. Discrepancyoverlay ☒ 37. Descriptive Report ☒ 38. Field inspection photographs ☒ 39. Forms ☒40. R. Glau
ReviewerJoseph Steinberg
Supervisor, Review Section of Unit

41. Remarks (see attached sheet)

FIELD COMPLETION ADDITIONS AND CORRECTIONS TO THE MANUSCRIPT

APPLIED BY COMPILER

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:

M-2623-12

REVIEW REPORT T-9625
SHORELINE
June 17, 1968

61. GENERAL STATEMENT:

See Summary accompanying the Descriptive Report. PAGE 6

There is no Field Edit Report or Field Edit Sheet for this survey. Field edit evidently consisted of correction notations on the photographs made by the photogrammetrist and a revision to the shoreline by the compilation office. See paragraph E of the Hydrographic Report for H-8359, which is page 36 of this report, and the Field Inspection Report submitted by James P. Randall which is page 13 of this report.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS:

Comparison was made with copies of Registered Survey No. 1757, 1:20,000 scale, made in 1888 and No. 4007, 1:10,000 scale, made in 1922. The passage of time along with other changes have caused these surveys to become obsolete. Survey T-9625 supersedes these prior surveys for nautical chart construction purposes.

63. COMPARISON WITH MAPS OF OTHER AGENCIES:

A comparison was made with USGS PETERSBURG (A-5), ALASKA, 1:63,360 scale quadrangle, edition of 1953. The two surveys are in good general agreement, the USGS quadrangle being somewhat generalized due to its scale.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:

Comparison was made with copies of unreviewed survey H-8243 and reviewed survey H-8359. The shoreline of the hydrographic surveys and manuscript is in good agreement. All differences between the surveys have been noted on the Comparison Print which is bound with this report.

REFER TO PAGE 6

65. COMPARISON WITH NAUTICAL CHARTS:

Comparison was made with Chart 8172, 1:40,000 scale, 5th edition, November 23, 1964. The fixed aids to navigation in Dry Pass were evidently established subsequent to field inspection and hydrography in this area. Dry Pass Daybeacon 7, shown on this survey, has been changed to Dry Pass Daybeacon 15.

The dredging in Dry Pass was evidently also subsequent to hydrography. All differences between the chart and this survey have been noted on the Comparison Print.

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS:

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

The following photographs were examined during final review:

FIELD	OFFICE
41606 thru 41608	41541 thru 41543
41630 and 41632	41606 thru 41608
41655	41630 thru 41632
	41655 and 41656

Reviewed by:

Leo F. Beugnet
Leo F. Beugnet

Approved by:

For Mr. Stark
J. Bull, RADM,
Director, Atlantic Marine Center

Approved by:

Everett D. Ramsey
Chief, Photogrammetric Branch, *11/13*
R. H. Horel
Chief, Photogrammetry Division

Notes to Reviewer:

Project 6087
T-9625

The elevation of a rock awash about 800 meters SW of LEDGE, 1922 was field inspected on photos 41540 and 41606. Conflicting elevations for the same rock are shown. The higher of the two was noted on the manuscript.

The final reviewer computed an elevation of 6.4 ft. from the 28 May 1955 data and 8.3 ft. from the 2 June data on the photographs. Probably an elevation of 7 ft. (mean of the two) would be a more realistic elevation.

L.F.B.

G. SHORELINE AND TOPOGRAPHY:-

Shoreline and topographic details are from manuscripts T-9623, T-9624, T-9625 and T-9627 compiled by photogrammetric methods based on 1954 and 1955 field inspection data. There is a small amount of shoreline and topographic details on graphic control sheet LJ-A-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 hydrographer 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 the 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 bottom such as in Calder Bay. Steep foreshore prevented sounding in to the low-water line along most of the shoreline.

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

Shoreline on the boat sheet is from preliminary manuscripts T-9623, T-9624, T-9625 and T-9627 compiled without projections. Shoreline was transferred to the boat sheet to fit established control.

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.

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

Bar checks were taken when weather conditions permitted to a depth of 10 fathoms. Bar checks to 10 fathoms were in agreement with the 2 fm. bar checks, and the correction is entered in the sounding records as part of a combined phase-draft correction. All fathometer soundings are on A scale for which the phase correction is zero.

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

Soundings of adjoining sheets transferred to the boat sheet indicate that junctions are satisfactory and depth curves can be adequately drawn.

There are no holidays.

areas are as follows:

In the pass between Prince of Wales Island and Middle Island - the line between stations FAD and RYE.

In the pass between Middle Island and Divide Island - the line between stations HOG and CAM.

In the pass between Divide Island and Hamilton Island - a north-south line along longitude $133^{\circ} 31.1'$.

In Shakan Strait - the line between stations CON and MIL.

These lines are indicated on the boat sheet.

No time or range corrections were made on observed tides for either gage in their respective areas.

On 21, 23, 24 and 25 May Inner Shakan Bay gage was not in operation. During this period Outer Shakan Bay tides were used in the inner bay with a time difference of plus 15 minutes and a range ratio of 1.0. These values were obtained from the Washington Office (Ltr., ref. 36-161-9821, dated 14 October 1955.).

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 T.J.M. in 1922 supplemented in the northern part of the survey by triangulation executed by Curtis Le Fever in 1954 and by this party in 1955.

Topographic station CRY is a photo-hydro station located in 1954 on T-9624. Other topographic stations in this vicinity west of longitude $135^{\circ} 34'$ were also located in 1954 on T-9624 and were relocated in 1955 by other means. Geographic positions were computed for stations COD and BUM from fourth-order theodolite observations. Others were located by planetable on LJ-A-55. Note that station BUM used in 1955 is not the same as photo-hydro station BUM located in 1954 on preliminary manuscript T-9624.

Geographic positions for topographic stations ROS, BOB, PRU, UNA, VAL and WEB were computed from fourth-order theodolite observations.

Topographic stations in Shakan Strait were located by sextant fixes at the station and/or by sextant cuts from other shore stations. These should be shown on the smooth sheet as topographic stations.

Station SAW was located by a short traverse from WAS, 1915-1954. See H-8151. See also LJ-A-55.

All other topographic stations were located by plane-table on graphic control sheet LJ-A-55 (Registry No.).

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

35

PROCESSING OFFICE NOTES H-8243

SMOOTH SHEET

The smooth sheet was hand constructed by the Seattle Hydrographic Processing Unit, using standard methods of construction and checking.

CONTROL STATIONS

Control comes from the same source as for the boat sheet.

ADEQUACY OF SURVEY

The survey is complete and adequate for charting.

The junction with H-8151 was compared and found satisfactory. The depth curves can be adequately drawn at the junction.

Junction soundings in El Capitan Passage are not available in the processing office.

COMPARISON WITH CHART

A comparison was made with Chart 8172 3rd Ed. Revised 9/1/58, which was made up from the boat sheet.

See the section of Chart 8172 attached to this report, for discrepancies between the chart and the smooth sheet.

DANGERS AND SHOALS

Items under this heading in the Field Report have been checked or corrected to the smooth sheet values.

Respectfully submitted

WILLIAM M. MARTIN
Supervisory Cartographer

Approved and forwarded

G. C. Mast
G. C. MAST
Captain C&GS
Seattle District Officer

DEC REPORT
4-8559
- 4 -

E. SMOOTH SHEET:

The projection was hand-made by HODGSON personnel at the Seattle Ship's Base Processing Office.

Shoreline was transferred from blue lines of T-Sheet Nos. T-9625 (advance), T-10380 (advance), and T-10381 (advance). The shoreline was verified by the photogrammetrist in accordance with standard procedures. Considerable revision was necessary in the entrance to El Capitan Passage near Shakan Strait due to faulty identification by an earlier inspection party. The interpretation of the HWL was generally incorrect. Revisions were made on the field photographs and forwarded early in the season for compilation by the Washington Office. *Revised shoreline applied to Smooth Sheet.*

F. CONTROL STATIONS:

Triangulation was established in 1922 by T. J. M. Topographic control originated from T-9625, T-10380 and T-10381. *of 1953-57.*

No weakness was determined in the triangulation scheme except as previously pointed out in correspondence listed in Section A of this report. Mis-identification of triangulation stations POINT 1922 and LAST 1922 on photos required a new compilation by the Washington Office.

Likewise, photo-hydro locations of signals south of Anesket Point were initially weak due to inexperience. This all added to the confusion and complexity of the problems at hand. These photo-hydro locations were resolved in the field. Specifically they are ADD, GAG, BOB and DOG.

G. SHORELINE AND TOPOGRAPHY:

See Topographic Descriptive Report submitted earlier by J. P. Randall on 16 June 1957 which covers the subject material.

H. SOUNDINGS:

The low water line was defined by soundings in areas of gradual sloping beaches. This was confined to that portion of El Capitan Passage west of Long. 133° 18' W. The remaining portions of the passage has steep banks and generally only the 5 fathom curve could be delineated.

Wherever practical and if it was not too congested the 4 and 6 fathom curve was pencilled. Except in areas of gradual sloping beaches, it is recommended that the practice of running shoreline paralleling the beach in Alaska be reduced in the interest of economy. The author feels that where cross channel lines are run, as was done on the remainder of our 1957 sheets, little information is gained and the hazard of hitting rocks does not justify our added expense of time and equipment. It is estimated that 20 - 30% of our sounding time was devoted to running shoreline.

I. CONTROL OF HYDROGRAPHY:

All hydrography was controlled by sextant fixes taken at required intervals - were properly spaced between fixes.

H-8359
DESC. REPORT

Advance notice of new dangers and shoals was previously reported in a Charting Letter to the Director dated 28 May 1957.

Particular advantage was taken of minus tides to properly evaluate the alongshore rocks. Considerable time was saved in locating and obtaining the least depths on rocks showing at low water. This search was conducted by the topographer and noted on his photos. In some cases the hydrographer also obtained fix data on the same rock or group of rocks. The hydrographers location merely verifies the position and the topographic should be given highest weight. In most cases, the topographer stood on the high point of the rock, whereas, the hydrographer generally stood on the bow of the launch as it touched the edge of the rock or made an estimate of the distance off.

Rocks in this area taken from T-9625

There are several locations for the rock in the general area of 56° 09' 38" and 133° 21' 30". The disagreement is because the rock is actually a ledge with several different high points and at various stages of the tide, they appear as detached rocks. (a) A rock located by the topographer and not verified by the hydrographer is located at Lat 56° 09' 55" and Long. 133° 25' 28". A study of the topographic records previously forwarded should be made and it should be charted until proven otherwise.

Rocks from T-9625 (1953-57).

(b) Photos returned to field party and not available at time of Review. Chart until its existence is verified or disproved by examination of photos. I.M.Z. (9-27-59)

O. COAST PILOT

See Coast Pilot Report previously submitted and also Sections M and C of this report.

P. AIDS TO NAVIGATION

The position of Day Beacon No. 7 west of Dry Pass is the only fixed aid to navigation located on this sheet. It was reported on form 567 which was submitted for the entire season.

A list of Floating Aids follows:

Name	Latitude	Longitude	Depth	Pos. No.
Dry Pass Spar Buoy 9	56° 09' 22"	133° 27' 07"		Vol. 6p14 4/29/57
Dry Pass Spar Buoy 5	56° 09' 55"	133° 25' 34"	0.6 f	19 c 4/19/57
Dry Pass Spar Buoy 3	56° 09' 34"	133° 23' 18"	1.1 f	66c 4/19/57
Dry Pass Spar Buoy 2	56° 09' 33"	133° 23' 13"		Vol 7p33 9/2/57
Dry Pass Spar Buoy 1	56° 09' 31"	133° 22' 56"	0.2 f	26 n 5/9/57

It is the authors opinion that the following are the only aids to navigation in the following area: