

11488  
11490

11489  
11491

Diag. Cht. No. 6102.

Form 504	
U. S. COAST AND GEODETIC SURVEY	
DEPARTMENT OF COMMERCE	
DESCRIPTIVE REPORT	
Type of Survey	Shoreline
Field No.	Ph-1149
Office No.	T-11488 thru T-11491.
LOCALITY	
State	Washington
General locality	Clellam County
Locality	Lapush
19 <del>4</del> 54	
CHIEF OF PARTY	
F. Natella, Chief of Field Party	
L.W. Swanson, Div. of Photo. Wash., D.C.	
LIBRARY & ARCHIVES	
DATE	September 15, 1958

B-1870-1 (1)

11489  
11491  
11488  
11490

DATA RECORD

T - 11488 thru 11491

Project No. (II): **Ph-149**      Quadrangle Name (IV):

Field Office (II): **Forks, Washington**      Chief of Party: **Fred Natella**

Photogrammetric Office (III): **Photogrammetry Division**      Officer-in-Charge: **L. W. Swanson**  
**Washington, D. C.**

Instructions dated (II) (III): **1 October 1954**      Copy filed in Division of  
Photogrammetry (IV)

Method of Compilation (III): **Kelsh Plotter**

Manuscript Scale (III): **1:5,000**      Stereoscopic Plotting Instrument Scale (III): **Bridge - 1:6,000**  
**Compilation - 1:5,000**

Scale Factor (III): **None**

Date received in Washington Office (IV): **JUN 8 1954**      Date reported to Nautical Chart Branch (IV): **JUN 5 1954**

Applied to Chart No.      Date:      Date registered (IV): **27 Feb 1958**

Publication Scale (IV):      Publication date (IV):

Geographic Datum (III): **NA 1927**      Vertical Datum (III):

Mean sea level except as follows:  
Elevations shown as (25) refer to mean high water  
Elevations shown as (S) refer to sounding datum  
i.e., mean low water or mean lower low water

Reference Station (III): **Font 2, 1954**

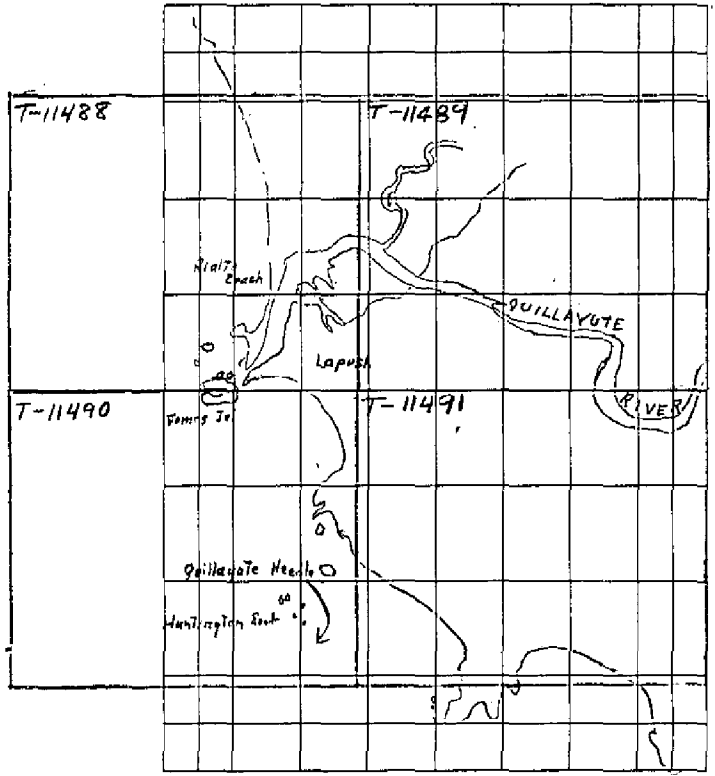
Lat.: **47 54 30.926**      Long.: **124 38 08.256**      Adjusted  
~~Unadjusted~~

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.



~~Areas contoured by various personnel~~  
 (Show name within area)  
 (II) (III)

Entire area detailed by J. D. Perrow

DATA RECORD

Field Inspection by (II): V. E. Serena

Date: Oct.-Nov. 1954

Planetable contouring by (II): None

Date:

Completion Surveys by (II): None

Date:

Mean High Water Location (III) (State date and method of location):

1954 Field inspection on ratio photographs

DELINEATIO BY KESH USING THE T.I. PHOTOS.

AKH

Projection and Grids ruled by (IV): Austin Riley

Date: 18 Jan. 1955

Projection and Grids checked by (IV): H. D. Wolfe

Date: 21 Jan. 1955

Control plotted by (III): J. D. Perrow, Jr.

Date: 24 Jan. 1955

Control checked by (III): C. E. Cook

Date: 24 January 1955

Radial Plot or Stereoscopic Control extension by (III): M. Keller  
C. E. Cook

Date: 15 April 1955

Stereoscopic Instrument compilation (III): Planimetry  
and  
Contours John D. Perrow, Jr.  
Shoreline

Date: 23 May 1955

Date: 23 May 1955

Manuscript delineated by (III): Virginia E. Winans  
John B. McDonald

Date: May 1955

Photogrammetric Office Review by (III): C. Theurer

Date: 1 June 1955

Elevations on Manuscript checked by (II) (III): ~~C. Theurer~~

Date: 1 June 1955



Camera (kind or source) (III): Wild C&GS

Number	Date	PHOTOGRAPHS (III) Time	Scale	Referred to MLLW Stage of Tide
W-2167 thru 2175	28 May 1954	10:00-10:05	1:15,000	+ 5.8
W-2224 thru 2234	2 June 1954	07:45-07:50	1:15,000	- 2.0
W-2236 thru 2145	2 June 1954	07:53-07:58	1:15,000	- 1.9

*From TABLE of RESORT TIDES*

Tide (III)

Reference Station: Aberdeen, Washington  
 Subordinate Station: Lapush, Quillayute River  
 Subordinate Station:

Diurnal		
Ratio of Ranges	Mean Range	Spring Range
	7.8	9.9
0.8	6.3	8.3

Washington Office Review by (IV): *A.K. HEADON*

Date: *JAN 1958*

Final Drafting by (IV):

Date:

Drafting verified for reproduction by (IV):

Date:

Proof Edit by (IV):

Date:

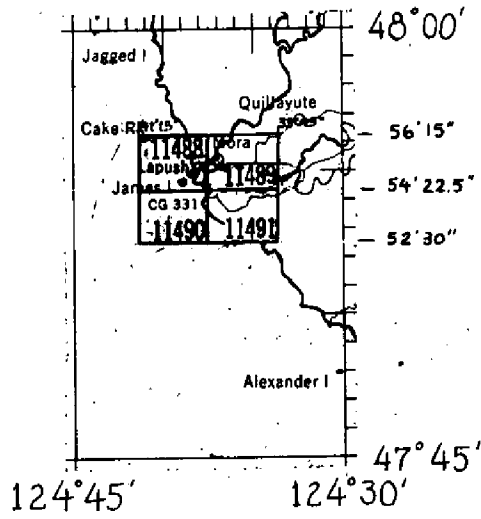
Land Area (Sq. Statute Miles) (III): *13*  
 Shoreline (More than 200 meters to opposite shore) (III): *10*  
 Shoreline (Less than 200 meters to opposite shore) (III): *10*  
 Control Leveling - Miles (II):  
 Number of Triangulation Stations searched for (II): *4* Recovered: *3*  
 Number of BMs searched for (II): Recovered:  
 Number of Recoverable Photo Stations established (III): *2*  
 Number of Temporary Photo Hydro Stations established (III): *20*

Identified: *10 (7 stations established)*  
Identified:

Remarks:

# SHORELINE MAPPING PROJECT PH-149

La Push, Wash.



## OFFICIAL MILEAGE FOR COST ACCOUNTS

SHEET NO.	LIN. MI. SHORELINE	AREA SQ. MI.
11488	6	2
11489	7	4
11490	4	1
11491	3	6
<b>TOTALS</b>	<b>20</b>	<b>13</b>

SUMMARY TO ACCOMPANY DESCRIPTIVE REPORT FOR  
T-11488 thru T-11491

There are four maps in this project, PH-149. It covers a portion of the Quillayute River at LaPush, Washington.

Its purpose was to supply the necessary information to Nautical Charts for the construction of a Nautical Chart insert for Chart 6102.

This is a stereo-instrument project utilizing the Kelsh and C-5 Stereoplanigraph. It was done in advance of hydrographic surveys to be made of the same area.

The field operations preceding compilation included complete field inspection and the establishment of some additional horizontal control.

The instrument compilation was at a scale of 1:6000 from which a manuscript of 1:5000 was made showing shoreline, alongshore features and photo-hydro stations.

The manuscripts consist of one sheet each  $6 \frac{3}{4}$  minutes in longitude by 1 52.5 minutes in latitude.

The registered copy will include a cronar film positive.

## FIELD INSPECTION REPORT

LA PUSH, WASHINGTON

Project Ph-149

November 1954

## 2. Areal Field Inspection:

Field inspection was completed in accordance with project instructions. Both interior and shoreline inspection is complete and adequate with the exceptions noted in the body of this report.

The project area is central to the Quillayute River. Heavily wooded, nondescript hills; ranging to some 300 feet, are to the north and south. The shore is a regular succession of bare rocky headlands and curving gravel and stone beaches.

The photography is very good except for the opaque shadows obscuring the shoreline on the north sides of Teahwhit Head, James Island, and the rocky point lying between the two.

## 3. Horizontal Control:

(a) Horizontal control was established as specified on the reprint edition of the La Push map supplied the field party. The supplemental control was established in conjunction with the triangulation party under the command of Comdr. Ross A. Gilmore. The triangulation party retained all of the original angular data and computed the geographic position of stations established. Copies of geographic positions, lists, and allied records were furnished this party and are submitted with this report. A sketch of the triangulation scheme will be included in Comdr. Gilmore's report.

The following control stations were established by triangulation:

LOG 2, 1954	PAIN, 1954
LOG 2 AZ MK, 1954	PARK, 1954

(b) No datum adjustments were made by the field party.

(c) Station STEEL was established by the U. S. 29th Engineers in 1935 and tied into the U.S.C.&G.S. net in 1954.

(d) All control stations specified in the instructions were recovered or established, and identified.



(e) The triangulation party recovered all Bureau stations in the area. Copies furnished this field party are being forwarded with the remainder of the records.

(f) All stations are believed to be positively identified. Two substitute stations were selected for station PARK. Point A is located inside the limits of the area circled on the reprint map edition. The first leg of the traverse to this point is short relative to the length of the traverse so another substitute station (B) was selected as an alternate control point. The second point is in the small park just west of the area in which the point was requested.

4. Vertical Control:

Not applicable.

5. Contours and Drainage:

Contours are not applicable.

The drainage along the shore proceeds through dense woods and is not generally discernible on photographs. The points of entree upon the shoreline and the trend of back-of-shore channels were sketched with the aid of inspection in the field.

6. Woodland Cover:

The hilly portion of the project is densely covered with evergreen trees. Deciduous trees predominate in the river valley and in small scattered stands along the shore. The identification of tree types is readily apparent and may be extended, as desired, by analogy with inspected areas. The growth designated as scrub, notably around station LA PUSH, consists of thick stands of 10 foot high salal and salmon berry.

7. Shoreline and Alongshore Features:

(a) The mean high-water line is not visible on the gravel to stone beaches on field photographs. The line was located by reference measurement to points of identifiable detail along the shore.

The shadowed rocky headland immediately south of La Push does not lend itself to inspection from along the shore. Heavy seas made it impossible to launch a small boat during the field season. The shoreline was inspected from vantage points, to the north, through field glasses and should be checked for accuracy by the hydrographic party.

(b) The instructions did not specify the location of the lower



low-water line and no attempt was made to do so.

(c) The foreshore, except for the beach immediately south of the mouth of the Quillayute River, is foul with numerous boulders. The sediments, where observed at lower stages of the tide, have been noted on field photographs.

(d) Bluffs or cliffs are common to the entire shore area. Sloping, heavily wooded 150 to 200 foot bluffs lie in back of the graded beaches while cliffs of the same height are general to the prominent headlands.

(f) No submarine cables were found in the area.

#### 8. Offshore Features:

No offshore features could be visited because of heavy seas. The delineation of rocks and rock islands were determined by inspection through binoculars from shore. Rock heights were computed using scaled distances and mil values observed through field glasses. **THE ROCK HEIGHTS FURNISHED BY THE FIELD PARTY WERE LATER CHECKED IN THE KETCH AND FOUND TO**

The project photographs were taken while the tide was at a minus **3 1/2** stage. Inspection at comparable tides was not possible during the field season. Many rocks and many points of photographic detail that **GOOD AGREEMENT** may be rocks were not visible during field inspection. **AKH**

It is recommended that the hydrographic party be cautioned to be more alert than usual in checking the accuracy of the delineation of offshore features. **THE ACCURACY OF THESE FEATURES COULD NOT BE CHECKED DURING FINAL REVIEW FOR A COMPARISON MADE SINCE THE (SMOOTH SHEET) HYDRO SURVEY WAS NOT AVAILABLE. SEE REVIEW REPORT ITEM 63.**

#### 9. Landmarks and Aids:

(a) Form 567 listing landmarks for nautical charts is being submitted with this report.

(b) There were no interior features suitable for listing as landmarks.

(c) No aeronautical aids are located in the area.

(d) James Island Light is the only fixed navigational aid. It was located by triangulation and is listed on form 567.

(e) No floating aids were located by the field party.

#### 10. Boundaries, Monuments, and Lines:

Not applicable.



## 11. Other Control:

Triangulation requirements necessitated the establishment of LOG 2, 1954 in an exposed position on the open beach. A carefully measured and monumented reference mark was placed on more stable ground, back of the treeline, for the use of the hydrographer should the station mark be lost or destroyed.

TEA AZ MK, 1954 was established in the course of founding the control point (PAIN) in Strawberry Bay. The triangulation party computed the position of this mark and its azimuth from PAIN. The latter may be of some use to the hydrographic party should they wish to extend control in and around the Bay.

The spacing of triangulation and topographic stations along the shore is adequate. Supplemental hydrographic control in the form of photo-hydro stations were selected where suitable objects could be found.

A sufficient number of hydro stations to control hydrographic surveys could not be selected along the Quillayute River; a large portion of the banks are obscured by overhanging trees; the detail on the pebble and stone bars is not stable because of seasonal flooding in the rainy season.

Hydro stations are identified on photographs by consecutive, two-digit numbers preceded by the last two numbers of the map sheet in which they are located. This number together with a brief description and a leader to the station are detailed directly on the photographs in green ink.

## 12. Other Interior Features:

The sparse culture in the area is found near the banks of the Quillayute River. The principal population center is La Push. It is located on the Quillayute River Indian Reservation, at the mouth of the river. The main industries are logging and fishing. Several farms, or ranches as the inhabitants sometimes call them, are found on either side of the river. Some of these farms have been abandoned. The remainder subsist on small herds of cattle.

The communities of Mora and Rialto Beach no longer exist. The bridge spanning the Dickey River was the only land connection. The bridge was washed out several years ago and has never been replaced. The property on the north side of the river has become a part of the Olympic National Park. *Replaced Jan '56 L 63(56)*

Transmission and power cables cross the Quillayute River at James Park. Information pertaining to the cables was noted on pertinent photographs.

## 13. Geographic Names:

A report on geographic names is being submitted under separate cover.

## 14. Special Reports and Supplemental Data:

A report on the complete Coast Pilot investigation of the project area is being submitted under separate cover.

Approved and forwarded:



Fred Natella  
Comdr., USC&G Survey  
Chief of Party

Respectfully submitted:



Victor E. Serena  
Cartographic Aid (General)  
USC&GS



PHOTOGRAMMETRIC PLOT REPORT  
PROJECT PH-149

21. AREA COVERED

T-11488, T-11489, T-11490, T-11491

22. METHOD

The photography was at 1:15,000 scale and the manuscript at 1:5000 scale.

The extension of control was accomplished by the Stereoplanigraph, the detailing by the Kelsh.

Graphic adjustment was made in each strip and points plotted on the manuscript.

Extensive tree areas of heights 150 feet or more made the selection and transfer of passpoints difficult. Tops of trees had to be used frequently as passpoints affecting in some degree the horizontal accuracy.

Adjustment was made to the passpoints between flights averaging 1.5mm.

23. ADEQUACY OF CONTROL

Control was adequate and complied with instructions.

Refer to Item 3, Paragraph (a) of the Field Inspection Report.

All control identified was held.

24. SUPPLEMENTAL DATA

None

25. PHOTOGRAPHY

The quality of both diapositives and photographs was good.

Respectfully submitted

*C. E. Cook*  
C. E. Cook

Technical Assistant to Chief,  
Division of Photogrammetry  
Thru : Chief, Operations Branch  
Charles Hanavich

17 December 1954

Field data on project Ph-149, La Push, Washington

1. The photogrammetric records and field inspection photographs for the project area have been examined, and the field work, on the whole, found to have been satisfactorily executed. A very good job of shoreline inspection was done along an extremely complicated coastline.
2. In reviewing the field inspection photographs, it was found that no photographic coverage is available for a few distant, off-lying rocks west of, and possibly northwest, of James Island.
3. Heavy seas or swells precluded the inspection of offshore features by boat. Therefore, field inspection notes for the interpretation of these features was accomplished by studying them through the binoculars from vantage points along the shore. This method of \* detached interpretation should be properly weighed during the office compilation of these features, and a field edit of the offshore details made during hydrographic operations.
4. Rock heights were computed by using scaled distances and nil intercept values observed through the field glasses. The accuracy of the heights determined by this method is questionable. In view of this, it is suggested that the heights of the offlying rocks be determined by the Kelsh plotter method and a comparison made with the field determinations so that the field inspector may be notified on the reliability of the field method used.
5. No attempt was made by the field inspector to inspect the MLLW line on the grounds that the instructions did not request it. On the contrary, the instructions did not modify the procedures for this phase of the work as outlined in the Topographic Manual (cf. Manual, items 5422 and 9151). Since the photography along the shoreline was taken at about 2 feet below the sounding datum, the delineation of the MLLW line can probably be accomplished by the Kelsh plotter.

\*  
Kelsh operators  
determined elev. of  
offlying rocks by  
instrument measurement  
and compare same  
with field values.  
Prepare tabulated list and turn over to me in

Charles Hanavich  
Field Elevations of rocks  
were in close agreement generally  
with instrument elevations  
with instrument elevations  
with instrument elevations



COMPILATION REPORT  
T-11488 - T-11491  
26 May 1955

31. DELINEATION:

Kelsh plotter "B" in the Washington Office was used in compilation. In the areas of dense shadows or trees where shoreline, roads, houses and small streams could not be seen, they were delineated by graphic methods.

Delineation of the shoreline southward from Triangulation Station Pain was not possible because models could not be cleared on the Kelsh plotter. *THE AREA WAS COMPILIO BY GRAPHIC METHOD FROM BRIDGE POINTS*

*AKH*

32. CONTROL:

Horizontal control was satisfactory in identification, density and placement.

Graphic methods were used in adjustment of bridges and horizontal control extension was accomplished with the Kelsh plotter. Bridging this area with the Kelsh plotter was difficult due to the density of trees and open water. In detailing the models, some pass points could not be held precisely. This situation was overcome by holding triangulation, as many pass points as possible, plus additional new pass points located from each model as detailing progressed.

33. SUPPLEMENTAL DATA: Not applicable.

34. CONTOURS AND DRAINAGE: Not applicable.

35. SHORELINE AND ALONGSHORE DETAILS:

Shoreline inspection furnished by the field party was adequate. Low water and foul lines were delineated by stereoscopic methods. Notes have been placed on the manuscripts indicating the areas where the MHW and MLLW lines are incomplete because of overhanging cliffs and shadows.

36. OFFSHORE DETAILS:

See Paragraph 49(c).

37. LANDMARKS AND AIDS:

See copy of Form 567 in this report.

38. CONTROL FOR FUTURE SURVEYS:

Forms 524 have been submitted for two recoverable topographic stations. A list of photo-hydro stations were prepared and is included in Paragraph 49.

39. JUNCTIONS: Not applicable.

40. HORIZONTAL AND VERTICAL ACCURACY: Not applicable.

41-45. Not applicable.

46. COMPARISON WITH EXISTING MAPS:

LA PUSH, Sheet 1079-1, AMS Series V791, 1:50,000, First Edition (AMS-1), 1936, Reprint (AMS-2) 1947

47. COMPARISON WITH NAUTICAL CHARTS:

U.S.C.&G.S. No. 6102  
1:176,253  
Published 1918  
4th Edition April 1946

Scale difference made comparison impractical.

49. NOTES FOR THE HYDROGRAPHER:

(a) Photo-Hydro Stations

- 8801 - Top of 55' rock
- 8802 - Top of rock
- 8803 - Top of 55' rock pinnacle
- 8804 - Center of tallest rooted snag. Marked by red cloth.
- 8805 - Center of power house
- 8806 - Top of rooted stump. Marked by red cloth.
- 8807 - Center of boulder on log bulkhead
- 8808 - Center of spruce and deciduous trees
- 8901 - Center, west side of pump house
- 8902 - Northwest end of log
- 8903 - Center of 5' rock
- 8904 - Center of rock
- 9001 - Top of 49' pinnacle rock
- 9101 - Top of pinnacle rock with tree on top
- 9102 - Intersection of drain and bluff. Red signal cloth tied to tree at drain.
- 9103 - Top of 60' pinnacle rock
- 9104 - Highest point of pinnacle rock
- 9105 - ~~Top of seaward pinnacle on rocky headland~~ *could not plot*  
9002 - center of 6 ft. long x 4 ft. in diameter log. Marked by nailed strip red signal cloth.

(b) Photo-Topo Stations

Aqua, 1954  
Keen, 1954



NOTES FOR THE HYDROGRAPHER (Cont'd):

(c) It should be noted that numerous sunken rocks were recorded by stereoscopic means. This was possible because these rocks were clearly visible at the stage of tide (2' below MLLW) when the photographs were taken. These rocks have been shown with the sunken rock symbol and should be checked by the hydrographer.

Offshore rocks west of James Island could not be delineated because of insufficient photograph coverage.

(d) Pass points and photograph centers have been located on the manuscripts in accordance with Photogrammetry Instructions No. 45, Revision 1. A ratioed set of photographs have been prepared with the same pass points and photograph centers so that additional control can be located by the hydrographic party.

Submitted by:

  
John D. Perrow, Jr.

Approved by:

  
C. Theurer



LA. PUSH, WASHINGTON

MAP T. PROJECT NO. Ph-119 SCALE OF MAP 1:5,000 SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR y-COORDINATE LONGITUDE OR x-COORDINATE		DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS		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)		FORWARD	(BACK)	
LA PUSH, 1914 r: 29 (d.m.)	G. P. 651	NA 1927	47-53-47.159		1456.6	396.5				
S. S. LA PUSH (d.m.)	G. P. Sheet (Field)	"	47-53-48.334		1492.9	360.2				
FONT 2, 1954	G.P. list 1636	"	124-37-34.690		720.5	525.8				
			47-54-30.834		952.3	900.8				
			124-38-08.248		171.3	1074.7				
S. S. FONT 2		"	47-54-31.4		968.4	884.7				
TOWER, LOOKOUT		"	124-38-09.4		196.0	1050.0				
U.S. Coast Guard Quillayute River 1954 (d.m.)	G.P. list 1638	"	47-54-31.656		977.7	875.4				
			124-38-11.815		246.6	999.4				
LOG 2, 1954	G.P. list 1638	"	47-55-27.939		862.9	989.2				
			124-38-20.527		426.1	819.5				
S. S. LOG 2		"	47-55-28.3		874.3	978.8				
LOG 2, 1954		"	124-38-20.7		429.3	816.3				
AZ. MK. (d.m.)	G.P. list 1636	"	47-56-19.442		600.5	1252.6				
			124-38-46.888		973.2	272.1				
SS LOG 2	G.P. Sheet Field	"	47-56-18.351		566.8	1286.3				
AZ. MK.		"	124-38-47.277		981.2	264.1				
TEA AZ. MK. 1954 (d.m.)	G.P. list 1636	"	47-52-21.354		659.5	1193.2				
			124-36-06.505		135.7	1111.7				
JAMES ISLAND LIGHT 1954 (d.m.)	G.P. list 1638	"	47-54-18.221		562.8	1290.3				
			124-38-46.096		957.3	288.8				
PARK SS (A)		"	47-55-06.1		188.2	1664.9				
			124-36-04.4		90.7	1155.1				

LA PUSH, WASHINGTON

Photogrammetry

MAP T. PROJECT NO. Ph-149 SCALE OF MAP 1:5,000 SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR y-COORDINATE LONGITUDE OR x-COORDINATE	DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS		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)	
JAMES ISLAND, 1916 (d.m.)	G. P. 651	NA 1927	47-54-19.330 124-38-40.872	597.0 848.8	1256.1 397.3				
James S. S. Island		"	47-54-18.5 124-38-40.8	570.4 852.4	1282.7 393.7				
TEA, 1929 (d.m.)	G. P. list 1636	"	47-52-18.495 124-36-33.574	571.2 697.7	1281.9 549.2				
S. S. Tea		"	47-52-20.4 124-36-32.4	629.7 667.3	1223.4 579.6				
Park, 1954 (d.m.)	G. P. list 1636	"	47-55-00.528 124-36-19.104	16.3 396.7	1836.8 849.1				
S. S. Park (B)		"	47-55-00.3 124-36-19.3	08.8 402.0	1844.3 843.8				
Pain, 1954 (d.m.)	G. P. list 1636	"	47-52-40.285 124-35-06.739	1244.2 140.0	608.9 1106.7				
S. S. Pain		"	47-52-37.0 124-35-03.1	1141.1 65.3	712.0 1181.5				
STEEL (use) 1954 (d.m.)	G.P. sheet field	"	47-53-57.677 124-34-07.714	1781.4 160.2	71.7 1086.0				
S. S. Steel		"	47-53-57.0 124-34-14.4	1760.8 304.9	92.3 941.3				



## PHOTOGRAMMETRIC OFFICE REVIEW

T-11488 - T 11491

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

## 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 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. C.T. Charles Hansen  
Reviewer 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-11488 thru T-11491  
SHORELINE  
January 20, 1958

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS

4090	1:10,000	1924
1788	1:20,000	1887
4449	1:10,000	1929

The shoreline manuscripts supercede all the above surveys in common areas as source material for chart construction. ---

There is some disagreement in many of the elevations of offshore islands between the 1929 planetable surveys 4448, 4449, and the Kelsh compilation. When this was noted, the elevations by Kelsh were verified by a resetting of the applicable models.

It is recommended the Kelsh elevations be used in the construction of nautical charts.

63. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS

The blueprints of two contemporary surveys were available at the time of review, BP 52975 and BP 52976.

These blueprints did not give entire hydrographic coverage of the project for comparison of offshore details. The areas not covered are as follows:

T-11488 Complete to Latitude 47°55'30"  
T-11489 No coverage  
T-11490 Complete  
T-11491 Complete except for the entire Strawberry Bay area

Small differences in the MHWL, exist but it is believed this is due to generalization on the part of the transfer rather than a change in the position. The hydrographic reports were not available to determine how the transfer was made.

The foreshore and offshore areas immediately adjacent to the foreshore are extremely rocky and foul and the map shows numerous sunken rocks and rocks awash. Each of these is definitely indicated on the photographs. Sunken rocks are those that seemed covered on photographs taken with -2.0 feet of tide.

Each rock outside of the foreshore area has been compared with the photographic copies of the boat sheets (BP Nos. 52975-76). In some cases sunken rocks or rocks awash exist close to soundings of 15 feet or more but those retained on this planimetric map have been so retained because of positive indication on the photographs.

Refer to item 8 for further discussion of offshore features.

It is suggested that an additional comparison between the hydrographic survey and the manuscripts be made at a future date since the available blueprints are difficult to read. As of this date the hydrographic surveys are in the processing office.

There is an engineer survey dated August 1956 extending from the mouth of the Quillayute River back approximately  $1\frac{1}{2}$  miles. The survey is USC&GS B. P. 54264. The MHWL on the manuscript and that on the engineer survey are not in agreement. The shoreline of the manuscript was field inspected in October 1954. The engineer shoreline has been generalized considerably and should not be used for the construction of nautical charts.

65. COMPARISON WITH NAUTICAL CHARTS

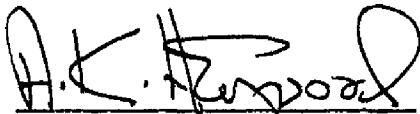
The comparison between the manuscripts and chart 6102 was of little use since the chart scale was 1:176,000.

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS


The low water line was compiled by instrument and is very approximate. The photographs, except for one flight, were taken 2' below MLLW.


Refer to item 7 of the Field Inspection Report paragraphs a, b, c, and to item 8, the last paragraph.

Reviewed by

  
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Approved

  
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14 Aug 1958

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