

9636,  
9636N, 9636S  
COMBINED

Diag. Cht. No. 6002-2.

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Topographic & Shoreline

Field No. Ph-62 Office No. T-9636

LOCALITY

State Washington

General locality Grays Harbor

Locality South Bend - Range Point to  
Raymond

1945-57

CHIEF OF PARTY

F. Natella, Chief of Field Party

E. H. Kirsch, Balto. Photo. Office

LIBRARY & ARCHIVES

DATE December 17, 1959

B-1870-1 (1)

9636,  
9636N, 9636S  
COMBINED

# DATA RECORD

T-9636

Project No. (II): **Ph-62(49)**

Quadrangle Name (IV):

Field Office (II): **Raymond, Washington**

Chief of Party: **Fred Natella**

Photogrammetric Office (III): **Baltimore, Md.**

Officer-in-Charge: **E. H. Kirsch**

Instructions dated (II) (III):

**20 MARCH 1951  
3 AUGUST 1951  
15 FEBRUARY 1952  
13 MAY 1952  
1 JUNE 1955**

Copy filed in Division of  
Photogrammetry (IV)

Method of Compilation (III): **Air Photographic (multiplex)**

Manuscript Scale (III): **1:17,000 (topographic)**

Stereoscopic Plotting Instrument Scale (III): **1:17,000 (topo.)**

**1:10,000 (shoreline)**

**1:10,000 (shoreline)**

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): **9/10/58**

Publication Scale (IV):

Publication date (IV):

Geographic Datum (III): **N.A. 1927**

Vertical Datum (III):

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): **PONY 2, 1953**

Lat.: **46° 41' 40.269"**

Long.: **123° 47' 56.418"**

~~Adjusted~~  
Unadjusted

Plane Coordinates (IV):

State:

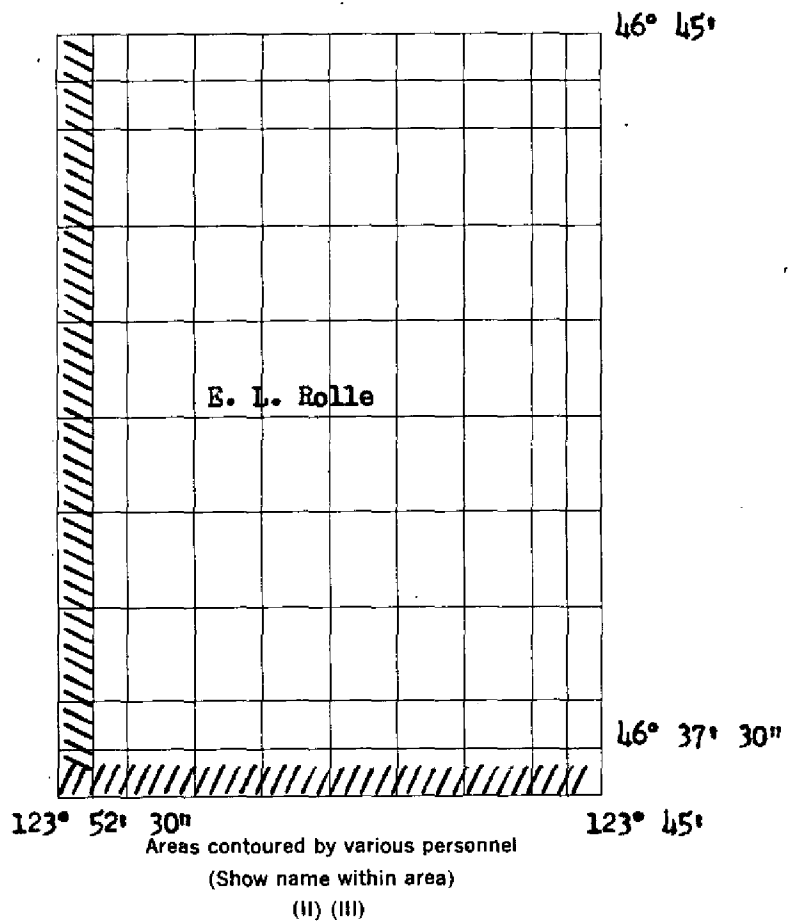
Zone:

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.





# DATA RECORD

Field Inspection by (II): Interior: John H. Winniford

Date: Aug.-Sept. 1953

Shoreline: William R. Kachel  
Gordon R. Combs

Jul.-Aug. 1953

Planetable contouring by (II):

Date:

Completion Surveys by (II):

CHARLES H. BISHOP

Date:

AUG. 1957

Mean High Water Location (III) (State date and method of location):  
11 July 1950 (Photogrammetric)

Projection and Grids ruled by (IV): Jack Allan

Date: 7 Sept. 1953

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

Date: 8 Sept. 1953

Control plotted by (III): A. K. Heywood  
\*D. M. Brant

Date: 15 Jan. 1954  
15 Jan. 1954

Control checked by (III): D. M. Brant  
\*A. K. Heywood

Date: 19 Jan. 1954  
19 Jan. 1954

Radial Plot or Stereoscopic Control extension by (III): E. H. Taylor

Date: 2 Feb. 1954

Stereoscopic Instrument compilation (III):

E. L. Rolle  
\*E. H. Taylor N/2  
Planimetry \*E. L. Rolle S/2  
Contours E. L. Rolle

5 Nov. 1954  
Date: 10 Feb. 1954  
11 Feb. 1954  
Date: 5 Nov. 1954

Manuscript delineated by (III): E. L. Rolle  
\* E. L. Rolle

Date: 15 Mar. 1955  
12 Mar. 1954

Photogrammetric Office Review by (III): J. D. McEvoy  
\* J. D. McEvoy

Date: 24 June 1955  
24 June 1955

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

J. D. McEvoy

Date: 15 June 1955

\*Applies to 1:10,000 shoreline survey only.



Camera (kind or source) (III):

Number	Date	PHOTOGRAPHS (III) Time (PST)	Scale	Stage of Tide
51-0-7147 thru 7150	6/16/51	1320	1:40,000	5.0' above MLLW
51-0-7170 thru 7174	"	1313	"	5.0' " "
50-0-1776 thru 1778	7/11/50	1606	1:24,000	7.3' " "
50-0-1797 thru 1801	"	1619	"	7.3' " "
50-0-1829 thru 1830	"	1639	"	7.2' " "
50-0-1841 thru 1842	"	1647	"	7.2' " "

From Predicted tables

Tide (III)

Reference Station: **Aberdeen, Wash.**  
Subordinate Station: **South Bend**  
Subordinate Station:

Washington Office Review by (IV):

Final Drafting by (IV):

Drafting verified for reproduction by (IV):

Proof Edit by (IV):

Land Area (Sq. Statute Miles) (III): **43**  
Shoreline (More than 200 meters to opposite shore) (III): **19**  
Shoreline (Less than 200 meters to opposite shore) (III): **4**  
Control Leveling - Miles (II): **42**  
Number of Triangulation Stations searched for (II): **80**  
Number of BMs searched for (II): **27**  
Number of Recoverable Photo Stations established (III): **8**  
Number of Temporary Photo Hydro Stations established (III): **none.**

Di-urnal

Ratio of Ranges	Mean Range	Spring Range
	7.8	9.9
1.0	7.8	9.8

Date:

Date:

Date:

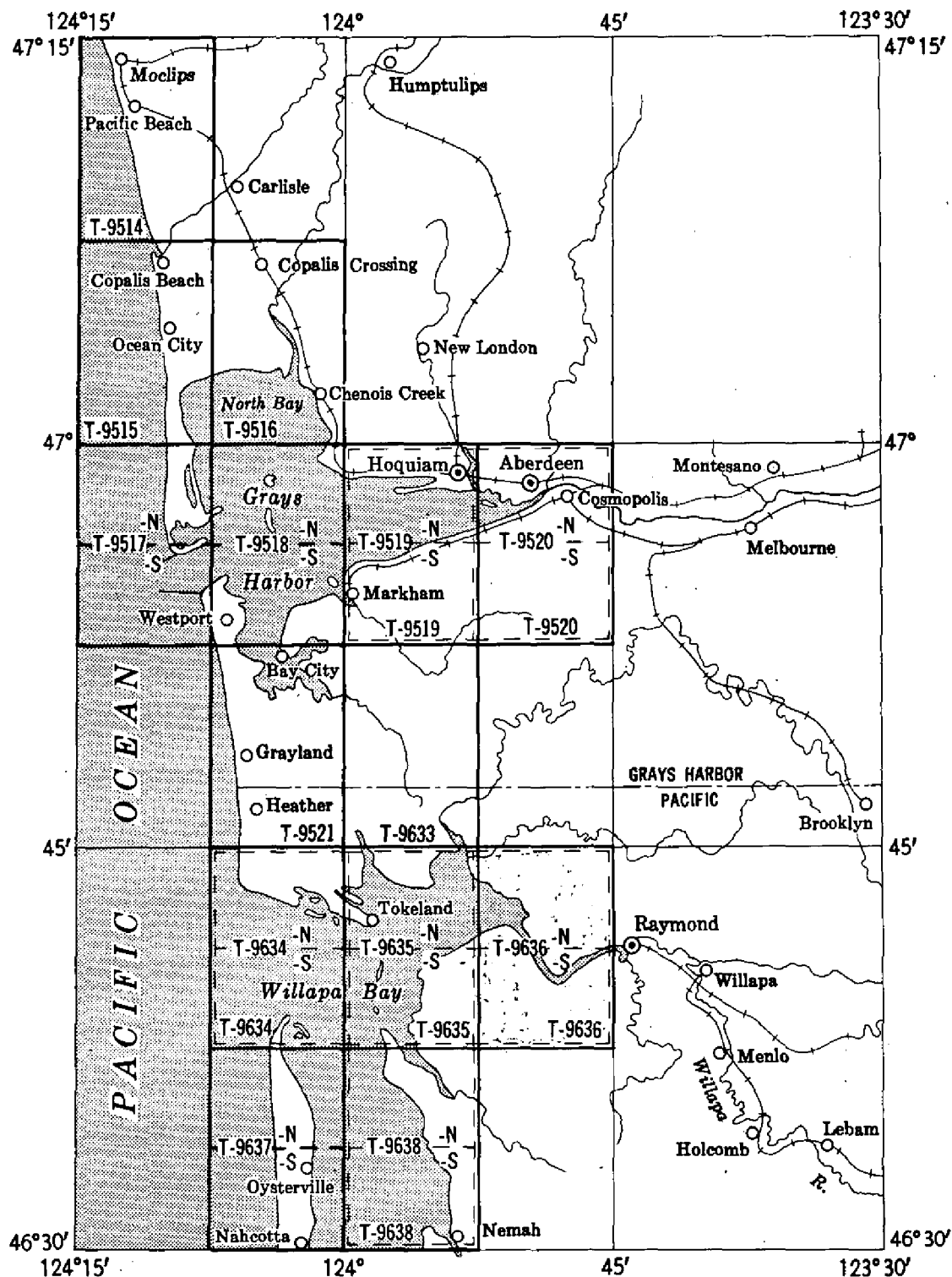
Date:

Remarks:

# TOPOGRAPHIC AND SHORELINE MAPPING PROJECT PH-62 (49)

## WASHINGTON, Grays Harbor - Willapa Bay

Compilation scales 1:10,000 and 1:20,000



TOPOGRAPHIC MAPS: T-9514, T-9515, T-9516 T-9519, T-9520, T-9521, T-9633 to T-9636 and T-9638, (scale 1:20,000),  
T-9517-N, T-9517-S, T-9518-N, T-9518-S, T-9637-N, T-9637-S, (scale 1:10,000),  
SHORELINE SURVEYS: T-9519-N, T-9519-S, T-9520-N, T-9634-N, T-9634-S,  
T-9635-N, T-9635-S, T-9636-N, T-9636-S, T-9637-N, T-9637-S, scale 1:10,000,



SUMMARY  
TO ACCOMPANY DESCRIPTIVE REPORT T-9636

Topographic Map T-9636 is one of 14 similar maps in Project PH-62. It covers most of Willapa River.

This is a multiplex project in advance of hydrographic surveys to be made in the area.

The field operations preceding compilation included complete field inspection. The establishment of some additional horizontal control and the determination of elevations necessary to control a multiplex project vertically.

Both a topographic and a shoreline survey was made of this area.

The topographic compilation was at a scale of 1:17,000. The manuscript consists of one vinylite sheet  $7\frac{1}{2}$ ' in Latitude and  $7\frac{1}{2}$ ' in Longitude.

The shoreline survey consisted of two sheets T-9636N and T-9636S at a scale of 1:10,000. Each sheet being  $3\frac{3}{4}$ ' in Latitude and  $7\frac{1}{2}$ ' in Longitude.

The entire map was field edited. It does not meet the National Standards of Map Accuracy. It is to be published by the Geological Survey as a standard topographic quadrangle at a scale of 1:62,500 without an accuracy statement.

The registered copies under T-9636 will include cronar film positives of the topographic manuscripts and each of the shoreline maps.

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

MAP T-2636

PROJECT NO. Ph-62

SCALE OF MAP 1:17,000

1:10,000

SCALE FACTOR 1.000

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR $\psi$ -COORDINATE LONGITUDE OR $\lambda$ -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)
SOUTH BEND, CATH. CH. BRICK TOWER 1939	G-5768	N.A.	46	39	1405.9	(446.9)					
	P. 772	1927	123	47	1053.1	(222.6)					
SOUTH BEND FIRE STATION TOWER, APEX 1939	"	"	46	39	1818.3	(34.4)					
	"	"	123	48	737.8	(537.7)					
SOUTH BEND, H. CRON OYSTER CO. BLACK STACK, 1939	P. 773	"	46	39	1800.8	(51.9)					
	"	"	123	47	665.1	(610.4)					
SOUTH BEND, LONG ISLAND OYSTER CO. BLACK STACK, 1939	"	"	46	40	63.3	(1789.5)					
	P. 772	"	123	48	822.6	(452.9)					
SOUTH BEND PACIFIC COUNTY COURT HOUSE DOME, FINIAL, 1939	"	"	46	39	1409.3	(443.4)					
	"	"	123	48	695.9	(579.7)					
SOUTH BEND, WIND- MILL TOWER, 1939	"	"	46	40	815.1	(1037.7)					
	P. 771	"	123	48	656.4	(618.9)					
PORT, 1939	"	"	46	40	1577.3	(275.4)					
	P. 763	"	123	45	509.2	(766.0)					
POTTER, 1939	"	"	46	41	36.7	(1816.1)					
	P. 761	"	123	49	762.0	(513.2)					
RANGE, 1939	"	"	46	42	45.9	(1806.8)					
	P. 761	"	123	50	543.5	(731.2)					
SANDY 2 (USE), 1939	"	"	46	41	1812.4	(40.3)					
	P. 760	"	123	51	879.8	(394.9)					
SOUTH (USE), 1939	"	"	46	40	905.5	(947.2)					
	P. 762	"	123	45	1220.4	(54.9)					
VANE, 1939	"	"	46	40	813.6	(1039.1)					
	P. 762	"	123	46	961.3	(314.0)					

1 FT. = 3048006 METER

COMPUTED BY A. K. Heywood

DATE 5 January 1954

CHECKED BY D. M. Brant

DATE 14 January 1954

COMM-DC-5784



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

MAP T. 9636

PROJECT NO. Ph-62

SCALE OF MAP 1:10,000  
1:17,000

SCALE FACTOR 1.000

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR $\nu$ -COORDINATE LONGITUDE OR $x$ -COORDINATE		DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS	DATUM CORRECTION	N.A. 1927 - DATUM		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS
							FROM GRID OR PROJECTION LINE IN METERS	FORWARD (BACK)	
STEWART (USE), 1939	G-5788 p. 761	N.A. 1927	46 42 03.683	123 51 25.077	113.7 (1739.0)				
WI-1 (USE), 1939	" p. 763	"	46 40 59.882	123 45 08.272	532.8 (741.9)				
RAYMOND ELEVATED TANK, BET. CASE MILL 1 & MILL NO. 2, 1939	" p. 776	"	46 40 51.76	123 43 19.23	1849.1 (3.6)				
WILLAPA BAY BEACON 4 (PIL), 1939	" p. 769	"	46 42 18.781	123 52 11.268	175.8 (1099.3)				
WILLAPA BAY BEACON (TON) 6, 1939	" p. 770	"	46 42 26.236	123 51 30.018	1598.3 (254.4)				
Y 61, 1937	G of E Monte Sano	"	46 46 42.490	123 44 22.157	408.7 (866.5)				
BUCK, 1939	G-5788 p. 762	"	46 39 47.738	123 46 49.561	579.9 (1272.8)				
COOP, 1939	" p. 761	"	46 42 25.804	123 49 31.314	239.4 (1035.2)				
CUT (USE), 1939	" p. 762	"	46 40 46.266	123 46 14.264	810.1 (1042.6)				
DAV (USE), 1939	" p. 762	"	46 40 49.927	123 45 55.996	637.6 (636.9)				
HENDERSON, 1939	" p. 763	"	46 41 41.858	123 43 58.555	1312.0 (540.7)				
HERON, 1939	" p. 760	"	46 41 48.342	123 52 02.941	470.1 (802.8)				

1 FT. = 3048006 METER  
COMPUTED BY A. K. Heywood

DATE 31 Dec. 1953

CHECKED BY: D. M. Brant

DATE 14 Jan. 1954

COMM-DC-57843



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

MAP T. 9636

PROJECT NO. Ph-62

SCALE OF MAP 1:10,000  
1:17,000

SCALE FACTOR 1.000

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR $\psi$ -COORDINATE LONGITUDE OR $\alpha$ -COORDINATE " " "	DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS FORWARD (BACK)	DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)	FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)
JOHNSON LIGHT (JOHN) 1939	G-5788 p. 771	N.A. 1927	46 42 08.200 123 49 56.657	253.2 (1599.5) 1203.6 ( 71.0)			
KNOB 2 (USE) 1939	" p. 762	"	46 40 12.017 123 48 49.219	371.1 (1481.7) 1046.2 ( 229.2)			
LOGGER, 1939	" p. 654	"	46 43 31.270 123 47 20.737	965.6 ( 887.2) 440.4 ( 833.8)			
MAILBOAT SLOUGH (LIGHT) LIGHT, 1939	" p. 771	"	46 41 13.486 123 48 57.201	416.4 (1436.3) 1215.5 ( 59.5)			
MAILBOAT SLOUGH RANGE REAR BEACON (MAIL) 1939	" p. 771	"	46 41 29.813 123 49 04.161	920.6 ( 932.1) 88.4 (1186.6)			
OPERA 2, (USE) 1939	" p. 761	"	46 39 50.026 123 48 07.253	1544.8 ( 308.0) 154.2 (1121.4)			
PONY 2, 1953	Field Comp.	"	46 41 40.269 123 47 56.418	1243.5 ( 609.3) 1198.8 ( 76.1)			
WILLAPA RIVER RANGE FRONT LIGHT 27, 1953	"	"	46 42 34.470 123 51 13.185	1064.4 ( 788.3) 280.1 ( 994.4)			
WILLAPA RIVER RANGE REAR LIGHT 27, 1953	"	"	46 42 44.590 123 50 21.802	1376.9 ( 475.8) 463.1 ( 811.4)			
MAILBOAT SLOUGH RANGE FRONT BN., (RANGE) 1939	G-5788 p. 771	"	46 41 24.265 123 49 02.854	749.3 (1103.5) 60.6 (1214.4)			
ZINE, 1939	G-5788 p. 761	"	46 40 43.646 123 47 20.954	1347.7 ( 505.0) 445.4 ( 829.9)			
SNAG, 1939	" p. 763	"	46 41 10.179 123 45 14.470	314.3 (1538.4) 307.5 ( 967.6)			

1 FT. = .3048006 METER

COMPUTED BY: E. L. Rolle

DATE 25 March 1955

CHECKED BY: H. P. Eichert

DATE 25 March 1955

COMM-DC-57843



1.000

[illegible]

DATE 15 Jan. 1954

CCAM-DC-5784

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

MAP T. 9636

PROJECT NO. Ph-62

SCALE OF MAP 1:17,000

1:10,000

SCALE FACTOR 1.000

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR $\nu$ -COORDINATE LONGITUDE OR $\lambda$ -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)	
Sub Sta "B" COOP	Comp.	N.A. 1927	46 42	723.0	(1129.7)				
			123 49	644.3	( 630.2)				
Sub Sta "A" COOP	"	"	46 42	722.3	(1130.4)				
			123 49	583.9	( 690.6)				
Sub Sta PONY 2, 1953	"	"	46 41	1230.0	( 622.8)				
			123 47	1201.1	( 73.8)				
Sub Sta "A" SANDY 2 (USE)	"	"	46 41	1817.4	( 35.3)				
			123 51	919.9	( 354.8)				
Sub Sta "B" SANDY 2 (USE)	"	"	46 41	1693.7	( 159.0)				
			123 51	973.0	( 301.7)				
Sub Sta KNOB 2 (USE) 1939	"	"	46 40	361.6	(1191.2)				
			123 48	1050.3	( 225.1)				
Sub Sta SOUTH (USE) 1939	"	"	46 40	890.3	( 962.4)				
			123 45	1193.8	( 81.5)				
Sub Sta "B" Y-61	"	"	46 46	1397.5	( 455.2)				
			123 44	419.3	( 853.6)				
Sub Sta "A" Y-61	"	"	46 46	1318.7	( 534.8)				
			123 44	441.3	( 831.6)				
Sub Sta " LOGGER, 1953	Trav. "H"	"	4524, 105.93	1251.5	( 272.5)				
			1, 175, 313.66	95.6	(1128.4)				
Sub Sta HENDERSON, 1939	Comp.	"	46 41	1287.6	( 565.1)				
			123 43	1255.7	( 19.1)				
Sub. Sta POTTER, 1939	"	"	46 41	61.0	(1791.8)				
			123 49	761.2	( 513.9)				

1 FT. = 3048006 METER

COMPUTED BY D. M. Brant

DATE 6 Jan. 1954

CHECKED BY A. K. Heywood

DATE 6 Jan. 1954

COMM-DC-5784



SCALE FACTOR 1.000

1 FT. = 3048006 METER	DATE	CHECKED BY:	DATE
COMPUTED BY: A. K. Heywood	14 Jan. 1954	D. M. Brant	15 Jan. 1954

COMM-DC-5784

COMPILATION REPORT  
Project Ph-62  
T-9636

Field Inspection Report - Bound with Descriptive Report for T-9633.

Photogrammetric Plot Report - Bound with Descriptive Report for T-9637.

31. DELINEATION

Reduction on film positive of 10,000 shoreline manuscript was used to delineate shoreline and alongshore area of 17,000 quad. Multiplex was used for delineation of contours and inshore areas. Detail points were dropped by multiplex along the shoreline on 10,000 scale manuscript which was compiled from photographs graphically.

32. CONTROL

Refer to Photogrammetric Plot Report for discussion of horizontal control.

Most of this area is covered by heavy woods making it difficult to read ground elevations.

33. SUPPLEMENTAL DATA

Land Plats:

Township No. 14	North,	Range No. 9	West
"	"	"	" 10 "
"	" 13	"	" " 9 "
"	" 13	"	" " 10 "
"	" 15	"	" " 10 "

34. CONTOURS AND DRAINAGE

Refer to item 34 of Compilation Report for T-9516.

Model 7146 - 47 could not be levelled as a unit. When favoring the elevations at the corners, those in the center of the model were about 20 feet high. Since the east quarter of the model was beyond the project limits, we accepted a solution which left this portion of the model low while the remainder of the elevations could be held.

An elevation was needed in the southwest corner of model 7149-50. We furnished this by having read a multiplex elevation when its adjoining model 7148 - 49 was set. In turn, another multiplex elevation had to be dropped in 7149 - 50 for use in SW corner of model 7150 - 51. It is realized that in heavily wooded areas such as these, it is difficult if not impossible for the field party to furnish all elevations as needed for precise levelling of the models.

Model 7170 - 71 because of its extensive timber and lack of vertical control is probably the weakest model in the quad.

The discrepancy overlay has been marked as an aid for suggested checks during the field edit.



35. SHORELINE AND ALONGSHORE DETAILS

As discussed in the field report, shoreline and adjacent areas were apparently difficult to interpret. Inspection was followed during the compilation as closely as possible. \* Limits of marsh and grass in water in most cases was interpreted from the photographs.

\* RESOLVED DURING FIELD EDIT.

AKA  
P

36. OFFSHORE DETAILS

The numerous offshore details are believed to be fairly complete. Some additions and corrections are expected to be made during the hydrographic survey.

37. LANDMARKS AND AIDS

Forms 567 were forwarded 5 April 1954 for Landmarks and Aids. During the hydrographic survey which followed, Form 567 for five (5) additional landmarks to be located by multiplex was furnished to this office. Three (3) of these are off the east limits of the survey. Although all the additional landmarks had been identified on the field inspection photographs, none had been listed on Forms 567 furnished us by the original field party, nor had identification forms been received. We have now located these objects and another Form 567 is submitted herewith.

38. CONTROL FOR FUTURE SURVEYS

Topo station TER listed in field inspection report as on quad T-9635, should be on quad. T-9636.

Topographic stations BAN, DIKE and DRUM are off the east limits of the survey. A new position for BAN was established by multiplex. The 1939 position of DRUM was verified. DIKE had not been identified by the field party.

A list of recoverable topographic stations on this survey was submitted on 5 April 1954 with "Notes For the Hydrographer."

39. JUNCTIONS

Junction has been made with survey T-9635 to the west.

There are no contemporary surveys to the north, south or east of this quad.



40. HORIZONTAL AND VERTICAL ACCURACY

Refer to item 34 of Compilation Report for T-9516.

46. COMPARISON WITH EXISTING MAPS

AMS Quadrangle Aberdeen, Sheet 1277 III, Series V-791, scale 1:50,000 published, First Edition 1938, Second Edition 1947.

47. COMPARISON WITH NAUTICAL CHARTS

Chart No. 6185, scale 1:40,000 published 1952 (36th edition) correction date Oct. 6, 1952.

Respectfully submitted  
30 June 1955

Approved and Forwarded

Joseph D. McEvoy  
Carto. Photo. Aid

E. H. Kirsch,  
Officer-in-Charge  
Baltimore District

## PHOTOGRAMMETRIC OFFICE REVIEW

T. 9636

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
- None
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
- None
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. Joseph D McEwen Henry P. Fisher  
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.

J. McEwen Henry P. Fisher  
Compiler Supervisor

43. Remarks:

6/12/58  
M-2623-12

48. GEOGRAPHIC NAMES LIST

Bone River

Camenzind Road

Cemetery Road

Church Road

Donaldson Creek

~~Eklund Park~~*deleted by Field Edit*

Fredrickson Slough

I I Slough

Johnson Slough

Kellogg Slough

Mailboat Slough

North Fork Palix River

Northern Pacific

Old South Bend Raymond Road

Potter Slough

Raymond

Range Point

Skidmore Slough

Smith Road

South Bend

South Bend Palix River Road

~~Stewart Slough~~*Correction by Field Edit.*

STUART

U. S. 101

Wash. State 12

Welsh Ranch

Willapa Harbor Airport

Willapa River



COPY

COPY

COPY

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

POST-OFFICE ADDRESS: West Coast Field Party

TELEGRAPH ADDRESS: P.O. Box 585

EXPRESS ADDRESS: San Mateo, California

8 December 1954

To: Officer in Charge  
Baltimore Photogrammetric Office  
U. S. Coast & Geodetic Survey  
518 East 32nd Street,  
Baltimore 18, Maryland

Subject: Landmarks for charts, Willapa Bay - Project CS-362 (Ph-62)

Reference: Chart Letter No. WCFF-54-8, dated 25 October 1954.

A copy of referenced chart letter is enclosed.

Your attention is called to the five (5) objects for which only approximate positions were listed. These objects were identified on the field photographs which were forwarded to your office on 27 October 1954. The manuscripts furnished this party did not cover this area, and final locations could not be determined.

C. A. George  
CDR., USCGS  
OinC, West Coast  
Field Party

Enclosure (1)

cc; The Director

**TO BE CHARTED**

**STRIKE OUT ONE**

TO BE CANCELED  
TO BE DELETED

## NONFLUENT/STUTTERING OR LANDMARKS FOR CHARTS

Baltimore, Maryland

15 June 1955

I recommend that the following objects which ~~have~~ *(have not)* been inspected from seaward to determine their value as landmarks be charted on ~~(be charted on)~~ the charts indicated.

The positions given have been checked after listing by Henry P. Elchert

[illegible]

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *nonfloating*

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

U. S. COAST AND GEODETIC SURVEY

# NONFLOATING AIDS ORLANDMARKS FOR CHARTS

~~TO BE DELETED~~

**STRIKE OUT ONE**

**Baltimore, Maryland**

25 Feb. 1951

I recommend that the following objects which ~~have~~ *(have not)* been inspected from seaward to determine their value as landmarks be charted on ~~(attached to)~~ the charts indicated.

The positions given have been checked after listing by **Renny P. Elchert**

**पञ्चमः प्रश्नः**

**Chief of Party.**

STATE	WASHINGTON	CHARTING NAME	DESCRIPTION	SIGNAL NAME	POSITION						DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
					LATITUDE #		LONGITUDE #		DATUM						
					°	'	°	'							
					D.M. METERS	D.P. METERS	D.M. METERS	D.P. METERS							
DN	(Willapa River Daybeacon 28, 1953)	46 42	23 57.4	123 50	54.516	1927	T-9636	1953	X			6185			
BN	(Willapa River Daybeacon 30, 1953)	46 42	23 57.9	123 50	54.516	"	T-9636	"	X			"			
LT	(Willapa River Range Front Lt. 27, 1953)	46 42	23 57.4	123 51	54.516	"	T-9636	"	X			"			
LT	(Willapa River Range Rear Lt. 27, 1953)	46 42	23 57.9	123 50	54.516	"	T-9636	"	X			"			
DN	(Willapa River Range Front Daybeacon 37, 1953)	46 41	23 57.3	123 49	54.516	"	T-9636	"	X			"			
BN	(Willapa River Range Rear Daybeacon 37, 1953)	46 41	23 57.3	123 49	54.516	"	T-9636	"	X			"			
LT	(Willapa River Lt. 33, 1953)	46 42	23 57.3	123 49	54.516	"	T-9636	"	X			"			
LT	(Willapa River Lt. 39, 1953)	46 41	23 57.3	123 48	54.516	"	T-9636	"	X			"			
BN	(Willapa River Daybeacon 22, 1953)	46 42	23 57.3	123 52	54.516	"	T-9636	"	X			"			
BN	(Willapa River Daybeacon 26, 1953)	46 42	23 57.3	123 51	54.516	"	T-9636	"	X			"			
</															

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *nonfloating*



FIELD EDIT REPORT

Project Ph-62

T-9635 and T-9636

1 August 1957

V. R. Sobieralski, Chief of Party

51. Methods

Field edit of these maps was done in accordance with Letter Instructions for Field Edit, Project Ph-62, dated 1 June 1955, and Notes to the Field Editor on the discrepancy prints. The work was accomplished in June and July 1957.

All planimetric features have been edited. Deletions and additions have been made on Field Edit Sheet Nos. 1, 2 and 3 (T-9636) and Field Edit Sheet No. 1 (T-9635).

Notes to the field editor on the discrepancy prints have either been answered on the print itself or cross-referenced to the proper source of information.

In general, violet ink has been used for elevations and contour corrections made by planetable, whereas barometric elevations and contour changes have been indicated with red ink. One planetable traverse in T-9635 on the south side of the Bone River was inadvertently inked with red ink. Deletions have been made with green ink. Red ink has been used to check, correct and add cultural features.

No section corners or points on line were located in T-9635.

The following section corner in T-9636 was recovered and located by planetable:

Section Corner 32, 33, 5, 4 T14, 15N R9W, located on Field Edit Sheet No. 1.

The following section corners and points on section lines were recovered and identified on 1:20,000 scale field photographs:

<u>Point</u>	<u>Identified on Photo</u>
Section Corner 29, 28, 32, 33	51 0 7173
T14N R9W	
" " 31, 1, 6	51 0 7173
T13, 14N R9, 10W	

<u>Point</u>	<u>Identified on Photo</u>
Section Corner 36, 31, 1	
" " T13, 14N R9, 10W	51 0 7173
" " 5, 4, 8, 9	
" " T13N R9W	51 0 7174
Point on line 3 T14N R11W	51 0 7149
" " 10	
" " 5/4 T14N R9W	51 0 7171
" " 3/4 T14, 15N R9W	51 0 7150
" " 3	
" " 10/11 T14N R9W	51 0 7149
" " 11 T14N R9W	51 0 7149
" " 14	

Field edit information has been noted on the discrepancy prints, Field Edit Sheets 1 through 3 in T-9636, Field Edit Sheet No. 1 in T-9635 and on the following 1:20,000 scale field photographs:

<u>Photograph</u>	<u>Information</u>
51 0 7173	Section Corner
51 0 7174	Section Corner
51 0 7148	Buildings at west edge of Raymond
51 0 7149	Point on section line
51 0 7150	Point on section line
51 0 7171	Point on section line
51 0 7172	Terminal of submarine cable
51 0 7205	Terminal of submarine cable
51 0 7303	Terminal of submarine cable and buildings
51 0 7304	Shoreline in Bay Center and buildings

State Highway 13-A is being extended westward from the Airport Road at Willapa Harbor Airport and the present contract will take it to North River. Construction is now in progress and all of the road that could be located by planetable at the time of field edit has been located on Field Edit Sheet No. 1. Contract plans for the section from Airport Road to North River were obtained from the Washington State Highway Commission and are included with the field edit data. The following road survey stations have been located on the sheet by planetable methods: Stations 267+00, 296+56, 324+50, 335+50, 340+50, 406+00. It is believed that these stations will enable the compiler to align the new road on the map.



52. Adequacy of Compilation

No inadequacies were noted in the compilation and it will be complete with the application of the field edit data.

53. Map Accuracy

No deficiencies in horizontal accuracy were noted during field edit operations.

Vertical accuracy tests were run in both sheets. In T-9636 the tests were along the Palix River - South Bend Road and along Church Road. Of the one hundred and five points tested by plane-table, one hundred and one points or ninety-six percent of them were within one-half contour interval. Of fifteen points tested by barometric leveling, only sixty percent were within one-half contour interval. One would naturally expect the contours to be fairly accurate along the roads but inaccuracies are to be expected in the wooded areas where checking is extremely difficult and highly impractical. It is believed that this map will not conform to national map accuracy standards for a 40-foot contour interval because a large area of the map is wooded.

Three accuracy tests were run in the southeast corner of T-9635. Of ninety-three points tested by planetable, only seventy-six percent were within one-half contour interval. Of twelve points tested by barometric leveling, only eight points or sixty-seven percent were within one-half contour interval.

The accuracy tests have been abstracted and are submitted with this report.

54. Recommendations

No recommendations are made.

55. Examination of Proof Copy

A proof copy of these maps may be sent to the following named persons for examination:

Mr. I. W. Pottu  
County Court House  
South Bend, Washington

Mr. L. S. Mathews  
County Court House  
South Bend, Washington

Mr. Pottu is the Pacific County Engineer and Mr. Mathews is the office engineer for Pacific County.

The only discrepancy in geographic names that was noted is the spelling of Stuart Slough, near the west edge of T-9636. The correct spelling is STUART rather than STUWART as it is spelled on the map.

Approved:

Respectfully submitted:

V. Ralph Sobieralski  
LCDR C&G Survey  
Chief of Party

Charles H. Bishop  
Cartographer  
C&GS



REVIEW REPORT T-9636  
TOPOGRAPHIC  
August 25, 1958

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS

335	1:20,000	1852
2045	1:20,000	1890
2105	1:10,000	1891
2106	1:10,000	1890

This map supercedes all previous surveys for use in construction of nautical charts.

63. COMPARISON WITH MAPS OF OTHER AGENCIES

AMS Aberdeen Sheet 1277111, 1:50,000 2nd edition 1947

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS

None

65. COMPARISON WITH NAUTICAL CHARTS

Chart 6185 1:40,000 11/25/57

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS

Two vertical accuracy tests were run by planetable along roads. One test was run by barometric leveling through woods.

The planetable tests checked very well.  
The barometric test which was run through heavy woods did not meet standards.

Since a greater portion of this area is dense woods this manuscript will not meet the standards of map accuracy for contours.

The horizontal accuracy was checked during field edit and proved satisfactory.

This manuscript complies with all instructions and may be used as a base for chart construction.

-2-

67. SHORELINE SURVEYS

Shoreline manuscripts T-9636N, T-9636S scale  
1:10,000 cover the same areas as shown on the topographic  
manuscript.

The surveys are in agreement.

Reviewed by

A. K. Heywood  
A. K. Heywood

Approved

L. C. Lande  
Chief, Review Section  
Photogrammetry Division

L. W. Swanson  
Chief, Photogrammetry Div.

12 Nov 59

Max K. Keltz  
Chief, Nautical Chart Branch  
Charts Division

John Bowie  
Chief, Coastal Surveys Div.



## NAUTICAL CHARTS BRANCH

SURVEY NO. T-9636 N&S.

### Record of Application to Charts

[illegible]

M-2168-1

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.