

# 11590

diag

Diag. Cht. No. 6380.

Form 504

U. S. DEPARTMENT OF COMMERCE  
COAST AND GEODETIC SURVEY

## DESCRIPTIVE REPORT

Type of Survey Shoreline (Photogrammetric)

Field No. Ph-5905 Office No. T-11590

### LOCALITY

State Washington

General locality Skagit Bay

Locality Goat Island

-1959-60

### CHIEF OF PARTY

Lorne G. Taylor & Fred Natella

### LIBRARY & ARCHIVES

DATE September 1964

USCOMM-DC 5087

11590  
T-11590

DESCRIPTIVE REPORT - DATA RECORD

T - 11590

Project No. (II): Ph-5905

Quadrangle Name (IV):

Field Office (II): Mt. Vernon, Washington

Chief of Party: Lorne G. Taylor

Unit Chief: W. V. Hull

Photogrammetric Office (III): Portland, Oregon

Officer-in-Charge: Lorne G. Taylor  
& Fred Natella

Instructions dated (II) (III): 10 Feb. 1960 II

Copy filed in Division of

Supplement 1, 5 May 1960 II & III

Photogrammetry (IV)

Method of Compilation (III): Kelsh Instrument

Manuscript Scale (III): 1:10,000

Stereoscopic Plotting Instrument Scale (III): 1:6000

Pantograph Scale: 1:10,000

Scale Factor (III): None

Date received in Washington Office (IV):

NOV 6 1961  
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): X

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): NUTS, 1939

Lat.: 48° 19' 55.559"

Long.: 122° 32' 01.622"

Adjusted  
Unadjusted

Plane Coordinates (IV):

State: Washington Zone: North

Y= 490,483.62

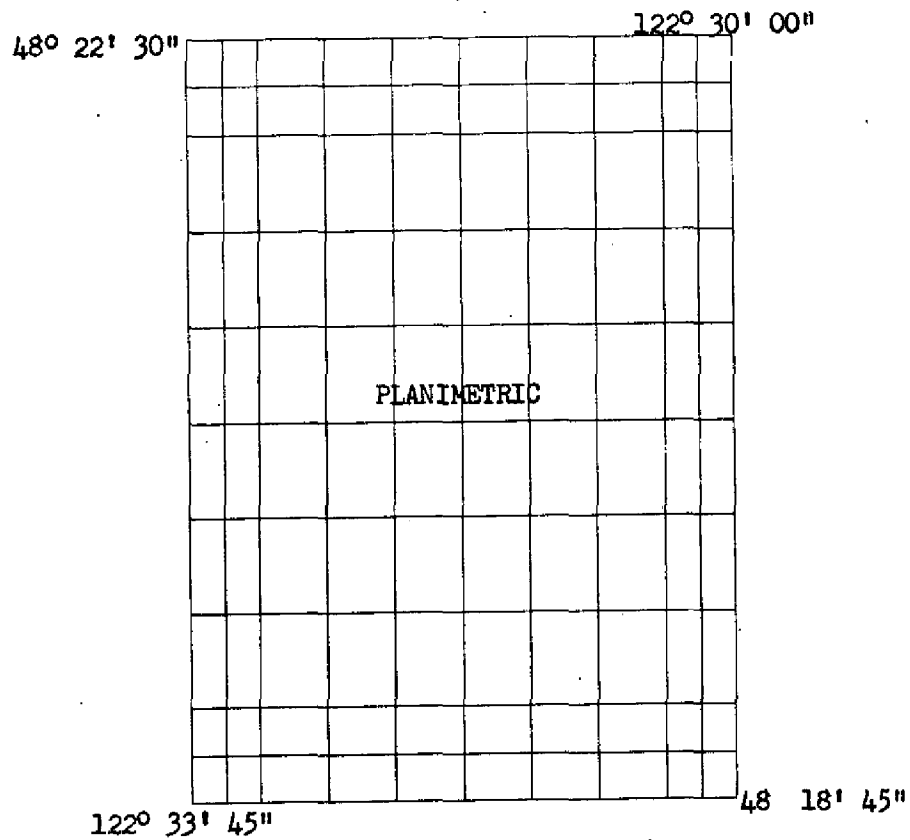
X= 1,586,393.57

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

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

DESCRIPTIVE REPORT - DATA RECORD

U.S. DEPARTMENT OF COMMERCE  
COAST AND GEODETIC SURVEY



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

DESCRIPTIVE REPORT - DATA RECORD

Field Inspection by (II): W. V. Hull & R. B. Melby Date: April & June 1960

Planetable contouring by (II): Date:

Completion Surveys by (II): Date:

Mean High Water Location (III) (State date and method of location): By field inspection on 6-30-60.  
Compilation by Kelsh Instrument and graphic methods.

Projection and Grids ruled by (IV): Souders Date: 6-16-60

Projection and Grids checked by (IV): J. Keefer Date: 8-18-60

Control plotted by (III): C. C. Harris Date: 9-30-60

Control checked by (III): L. L. Graves Date: 10-7-60

Radial Plot or Stereoscopic Control extension by (III): J. L. Harris, radial plot Date: 4-1-61  
W. A. Kuncis, Stereoplanigraph Bridge July 1960

Planimetry D. N. Williams Date: 12-29-60  
Stereoscopic Instrument compilation (III): Contours Date:

Manuscript delineated by (III): J. L. Harris, rough draft Date: 4-20-61  
C. H. Bishop, scribing 7-12-61  
C. C. Harris, stick-up 9-14-61

Photogrammetric Office Review by (III): C. C. Harris, rough draft Date: 4-26-61  
J. E. Deal, advance 9-18-61

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

# DESCRIPTIVE REPORT - DATA RECORD

5.

U.S. DEPARTMENT OF COMMERCE  
COAST AND GEODETIC SURVEY

Camera (kind or source) (III): C&GS 9-lens and Single lens "S"

PHOTOGRAPHS (III)				
Number	Date	Time	Scale	Stage of Tide
60-S-2717	4-26-60	11:24	1:30,000	0.2' below M.L.L.W.
60-S-2767 thru 2769	4-27-60	09:09	1:30,000	3.4' above M.L.L.W.
60007	9-9-59	08:56	1:10,000	7.4' above M.L.L.W.
60216 & 60217	9-9-59	11:12	1:10,000	8.7' above M.L.L.W.

Tide (III)

Reference Station: Seattle, Washington  
Subordinate Station: Ala Spit, Washington  
Subordinate Station:

Ratio of Ranges	Mean Range	Diurnal
		<del>Spring</del> Range
	7.6	11.3
	6.4	10.5

Washington Office Review by (IV):

Date:

Final Drafting by (IV):

Date:

Drafting verified for reproduction by (IV):

Date:

Proof Edit by (IV):

Date:

Land Area (Sq. Statute Miles) (III): 3.6

Shoreline (More than 200 meters to opposite shore) (III): 6

Shoreline (Less than 200 meters to opposite shore) (III): None

Control Leveling - Miles (II):

Number of Triangulation Stations searched for (II): 21 Recovered: 11 Identified: 2

Number of BMs searched for (II): 2 Recovered: 2 Identified: 2

Number of Recoverable Photo Stations established (III): 4

Number of Temporary Photo Hydro Stations established (III): None

Remarks:

## FIELD INSPECTION REPORT

Map Manuscript T-11590

Project Ph-5905

Refer to the Field Inspection Report for the entire Project  
Ph-5905 by Wesley V. Hull, February 1960 to September 1960.

*Filed with Desc. Report T11584*

## PHOTOGRAMMETRIC PLOT REPORT

Map Manuscript T-11590

Project Ph-5905

Refer to the Photogrammetric Plot Report (Stereoplanigraph Bridge) Puget Sound, Washington, Strip No. 1 by W. A. Kuncis, July 1960. *Filed with Desc. Report T11584*

Refer to Photogrammetric Plot Report (Radial Plot) for Manuscripts T-11584 thru T-11586 and T-11589 thru T-11593 which is included in the Descriptive Report for T-11584.

MAP T. 11590

PROJECT NO. Ph-5905

SCALE OF MAP 1:10,000

SCALE FACTOR None

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)	
La Conner Jetty	Office	N.A.	502,718.18	2718.18	(2281.82)		828.5	(695.5)	
Light, 1960	Comp.	1927	1,585,605.43	605.43	(4394.57)		184.5	(1339.5)	
Sub. Station	"	"	502,714.31	2714.31	(2285.69)		827.3	(696.7)	
			1,585,610.27	610.27	(4389.73)		186.0	(1338.0)	
Seal Rocks Light	"	"	505,903.42	903.42	(4096.58)		275.4	(1248.6)	
1960			1,579,884.74	4884.74	(115.26)		1488.9	(35.1)	
BRIAR, 1934	Wash.N.	"	505,904.93	904.93	(4095.07)		275.8	(1248.2)	
	293		1,586,606.95	1606.95	(3393.05)		489.8	(1034.2)	
FORT, 1934	"	"	501,816.93	1816.93	(3183.07)		553.8	(970.2)	
	293		1,585,759.46	759.46	(4240.54)		231.5	(1292.5)	
GOAT, 1907	"	"	502,827.11	2827.11	(2172.89)		861.7	(662.3)	
	299		1,587,854.57	2854.57	(2145.43)		870.1	(653.9)	
GREY, 1934	"	"	494,159.05	4159.05	(840.95)		1267.7	(256.3)	
	293		1,582,546.33	2546.33	(2453.67)		776.1	(747.9)	
IKA, 1934 R.M.	Office	"	500,492.46	492.46	(4507.54)		150.1	(1373.9)	
	Comp.		1,593,458.71	3458.71	(1541.29)		1054.2	(469.8)	
INNES, 1888	Wash.N.	"	500,771.81	771.81	(4228.19)		235.2	(1288.8)	
	296		1,588,695.39	3695.39	(1304.61)		1126.4	(397.6)	9
ISLE, 1907	"	"	504,809.60	4809.60	(190.40)		1466.0	(58.0)	
	299		1,587,375.53	2375.53	(2624.47)		724.1	(799.9)	
NUTS, 1939	"	"	490,483.62	483.62	(4516.38)		147.4	(1376.6)	
	296		1,586,393.57	1393.57	(3606.43)		424.8	(1099.2)	
WHAD, 1939	Office	"	486,235.42	1235.42	(3764.58)		376.6	(1147.4)	
R.M. No. 2	Comp.		1,590,842.39	842.39	(4157.61)		256.8	(1267.2)	

1 FT. = .3048006 METER

COMPUTED BY: C.H.B.

DATE 9-8-60

CHECKED BY: J.L.H.

DATE 9-19-60

CONNA. DC. 57843



## COMPILATION REPORT

Map Manuscript T-11590

Project Ph-5905

31. Delineation:

Except for a small area in the northeastern part of the manuscript which was beyond the limits of the Kelsh models, the compilation was accomplished by the Kelsh Instrument. In this area the compilation was done by graphic means using nine lens photographs.

32. Control:

Horizontal control was adequate.

33. Supplemental Data:

Print, Map of Island Co., Washington, Scale 1" = 1 Mile.

34. Contours and Drainage:

Contours not applicable.

No drainage was field inspected and none is indicated by reference to U.S.G.S. 15 minute quadrangle, Deception Pass, Washington.

35. Shoreline and Alongshore Features:

The mean high-water line and alongshore features were adequately field inspected. Rocks not visible on the photographs were located by sextant fix. Also shoreline covered by shadows was located by sextant fixes furnished by the field inspection unit.

The determination of shoal lines was not extended northeast of the northwest shoreline of Whidbey Island. The last photograph covering the area taken at low-water is 60-S-2717 and it does not reach to the north and east limits of the manuscript. It would have been necessary to abruptly stop the shoal lines inside the limits of the manuscript. There is, however, much detail on shoal areas on photograph 60-S-2717 which may be of use to the hydrographer. A portion of the large mud and sand flats lying south and east of Goat Island are visible on this photograph and also some of the areas which bare at extreme low-water at the entrance to Swinomish Slough may be determined. Nine lens photographs of this area were taken at about 8.0 ft. above M.L.L.W. and other single lens at about 3.5 ft. above M.L.L.W.

Sand and mud flats which bare at low-water are an important characteristic of this area and photographs taken at low-water of the entire area would have been most desirable for complete delineation.

36. Offshore Details:

Rocks, dolphins and piling are features which have been compiled just offshore from the M.H.W.L.

37. Landmarks and Aids:

There are no landmarks.

Form 567 is submitted for six fixed aids to navigation.

38. Control for Future Surveys:

None.

39. Junctions:


Satisfactory junctions were made with T-11586 on the north, T-11589 on the west, T-11591 on the east and T-11597 on the south.

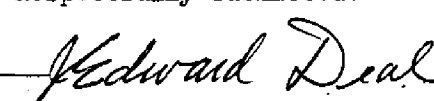
Items 40, 46 and 47:

Refer to the Descriptive Report for T-11588 (1960).

Approved:

Respectfully submitted:

  
Fred Natella, CAPT, C&GS  
Portland District Officer

  
J. Edward Deal  
Cartographer

49. Notes to the Hydrographer:

Refer to Item 35 of the compilation report.

T - 11590

COMPILATION RECORD	COMPLETION DATE	REMARKS
4. Interior details added Compilation complete	Sept. 18, 1961	

## PHOTOGRAMMETRIC OFFICE REVIEW

T.11590

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

## CONTROL STATIONS

5. Horizontal control stations of third-order or higher accuracy X 6. Recoverable horizontal stations of less than third-order accuracy (topographic stations) X 7. Photo hydro stations None 8. Bench marks X  
9. Plotting of sextant fixes X 10. Photogrammetric plot report X 11. Detail points X

## ALONGSHORE AREAS

(Nautical Chart Data)

12. Shoreline X 13. Low-water line X 14. Rocks, shoals, etc. X 15. Bridges None 16. Aids to navigation X 17. Landmarks None 18. Other alongshore physical features X 19. Other along-shore cultural features X

## PHYSICAL FEATURES

20. Water features X 21. Natural ground cover X 22. Planetable contours None 23. Stereoscopic instrument contours None 24. Contours in general None 25. Spot elevations None 26. Other physical features X

## CULTURAL FEATURES

27. Roads X 28. Buildings X 29. Railroads None 30. Other cultural features X

## BOUNDARIES

31. Boundary lines None 32. Public land lines None

## MISCELLANEOUS

33. Geographic names X 34. Junctions X 35. Legibility of the manuscript X 36. Discrepancy overlay None 37. Descriptive Report X 38. Field inspection photographs X 39. Forms X  
40. Carita C. Harris J. Edward Deal  
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:

48. Geographic Names:

Fidalgo Island

Goat Island

Ika Island

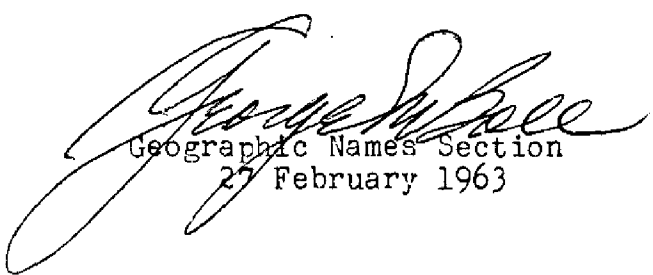
McGlinn Island

Seal Rocks

Skagit Bay

Swinomish Channel

Whidbey Island

  
Geographic Names Section  
27 February 1963

Review Report  
Shoreline Surveys  
T-11584 thru T-11593  
May 1964

61. General Statement

These are ten (10) shoreline maps of project PH-5905, Puget Sound, Washington. These maps were prepared primarily to provide basic maps, including the location of all non floating aids and landmarks for use in revising our nautical charts and for control of proposed hydrographic surveys.

62. Comparison with Registered Topographic Surveys

T-1252	1:10,000	1871
T-2156	1:20,000	1889
T-2856	1:20,000	1908
T-6684b	1:10,000	1939
T-6685a&b	1:10,000	1939
T-6686	1:10,000	1939
T-6687	1:5,000	1939
T-6689	1:5,000	1939
T-6769	1:10,000	1940

Agreement with the above surveys is in general fair. There are many differences most of which are due to natural changes, but the general picture presented by the above surveys are reasonably similar to that of the present surveys. The above surveys are to be superseded for the common area.

63. Comparison with Maps of Other Agencies

Deception Pass	1:62,500	1951
Utsalady	1:24,000	1956
Conway	1:24,000	1956

There are small cultural and shoreline differences but in general the agreement is good.

64. Comparison with Contemporary Hydrographic Surveys

None

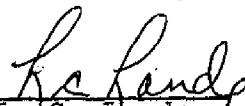
65. Comparison with Nautical Charts

See item 47.

66. Accuracy of Results and Future Surveys

These surveys comply with instructions and meet the National Standard of Map Accuracy.


Reviewed by:

  
L. C. Lande

Approved by:

  
Chief, Photogrammetric Branch

\_\_\_\_\_  
Chief, Nautical Chart Division

 7/27/64  
Chief, Photogrammetry Division



### RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. T-11590

## INSTRUCTIONS

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart.

1. Letter all information.
2. In "Remarks" column cross out words that do not apply.
3. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.

CHART	DATE	CARTOGRAPHER	REMARKS
6300	8-17-65	G. R. Johnson	Full <del>Part Before</del> After <del>Verification</del> Review <del>Inspection</del> Signed Via Drawing No.
18427	3-24-80	S M Hill 3-26-80 RAS	Full Part Before After Verification Review Inspection Signed Via Drawing No. 25
18441	3-24-80	S M Hill 3-26-80-RAS	Full Part Before After Verification Review Inspection Signed Via Drawing No. 49
18423B Inset 3	2-2-81	G. Jamel 2-6-81 RAS	Full Part Before After Verification Review Inspection Signed Via Drawing No. X Drg 21
18423 A	2-2-81	G. Jamel 2-6-81 RAS	Full Part Before After Verification Review Inspection Signed Via Drawing No. X Drg 21
18421	2-2-81	G. Jamel 2-6-81 RAS	Full Part Before After Verification Review Inspection Signed Via Drawing No. 47
18400	2-2-81	G. Jamel 2-6-81 RAS	Full-Part Before After Verification Review Inspection Signed Via Drawing No. 45
18440	3-18-81	D. C. Larson 3-18-81 RAS	Full <del>Part Before</del> After Verification Review Inspection Signed Via Drawing No. 33
			Full Part Before After Verification Review Inspection Signed Via Drawing No.
			Full Part Before After Verification Review Inspection Signed Via Drawing No.