11621

Diag. Cht. No. 6450-2.

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-11621

LOCALITY

State Washington

General locality Puget Sound - Port Susan

Locality Tulare Beach

1959-1960

CHIEF OF PARTY

Lorne G. Taylor & Fred Natella

LIBRARY & ARCHIVES

DATE September 1964

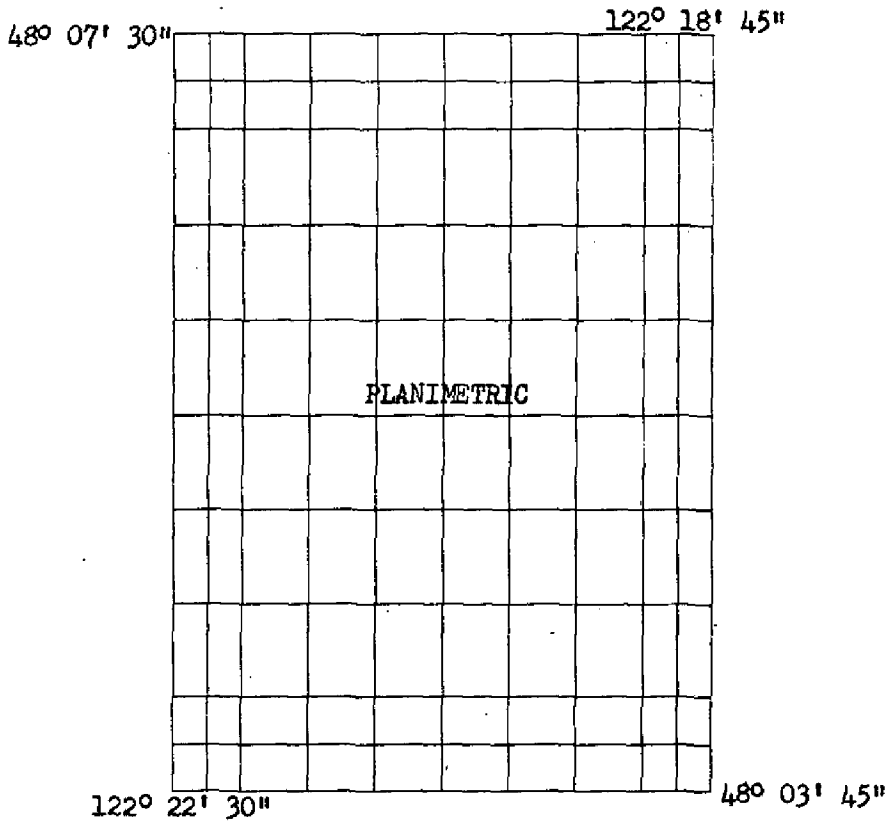
USCOMM-DC 5087

11621

FORM 181a
(4-23-54)

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT - DATA RECORD



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

FORM 181b
(4-23-54)

4.
U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT - DATA RECORD

Field Inspection by (II): L. F. Van Scoy & R. B. Melby Date: July & Aug. 1960

Planetable contouring by (II): Date:

Completion Surveys by (II): Date:

Mean High Water Location (III) (State date and method of location): Spot located by field inspection on 7-13-60; 7-15-60 & 7-26-60. Compiled by Kelsh Instrument and graphic methods.

Projection and Grids ruled by (IV):	J. Keefer	Date: 7-12-60
Projection and Grids checked by (IV):	W. S.	Date: 8-17-60
Control plotted by (III):	C. C. Harris	Date: 10-11-60
Control checked by (III):	L. L. Graves	Date: 10-11-60
Radial Plot or Stereoscopic Control extension by (III):	W. A. Kuncis J. L. Harris, Radial Plot	Date: July 1960 2-14-61
Stereoscopic instrument compilation (III):	Planimetry D. N. Williams	Date: 11-17-60
	Contours	Date:
Manuscript delineated by (III):	C. C. Harris, Rough Draft D. N. Williams, Scribing C. C. Harris, Stick-up	Date: 2-16-61 3-22-61 8-16-61
Photogrammetric Office Review by (III):	D. N. Williams, Rough Draft J. E. Deal, Advance	Date: 3-21-61 9-21-61
Elevations on Manuscript checked by (II) (III):	None	Date:

COMM-DC-57842

FORM 181c
(4-23-54)

5.

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT - DATA RECORD

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

PHOTOGRAPHS (III)

Number	Date	Time	Scale	Stage of Tide
60202 thru 60204	9-9-59	11:05	1:10,000	9.4 ft. above MLLW
60-S-2483 & 2484	4-25-60	13:04	1:30,000	3.0 ft. above MLLW
59-L-8483 thru 8489	9-9-59	11:05	1:30,000	9.4 ft. above MLLW

Tide (III)

		Ratio of Ranges	Mean Range	Diurnal ~~Spring~~ Range
Reference Station:	Seattle, Washington		7.6	11.3
Subordinate Station:	Tulalip, Washington		7.6	11.2
Subordinate Station:				

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): 5.6
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): 11 Recovered: 2 Identified: 1
Number of BMs searched for (II): None Recovered: Identified:
Number of Recoverable Photo Stations established (III): None
Number of Temporary Photo Hydro Stations established (III): None

Remarks:

COMM-DC-57842

FIELD INSPECTION REPORT

Map Manuscript T-11621

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 F11584

PHOTOGRAMMETRIC PLOT REPORT

Map Manuscript T-11621

Project Ph-5905

Refer to the combined Photogrammetric Plot Report (Stereoplanigraph Bridge) for Strips 1, 3, 4, 5, 6, 7, 8, 9, 10 and 11 by Willard A. Kuntis, July 1960. Filed with Desc. Report T-11584

Refer to Radial Plot Report for T-11621; T-11622 and T-11628 thru T-11630 which is included in this report beginning with page 9.

PHOTOGRAMMETRIC PLOT REPORT

Radial Plot

T-11621, T-11622 and T-11628 thru T-11630

Project Ph-5905

21. Area Covered:

This radial plot covers an area along and adjacent to the northeast shoreline of Port Susan from McKees Beach to the north part of Everett, Washington. It comprises map manuscripts T-11621, T-11622 and T-11628 thru T-11630. It is a continuation south of the radial plot for T-11598 thru T-11600; T-11606 thru T-11610 and T-11616 which is described and included in the Descriptive Report for T-11598 (1960).

22. Method:

Prints of the nine lens photographs were furnished on Cronarpaque and these were prepared by the usual methods. A pass point situated on the east shoreline of Camano Island which had been located in Strip 8 by stereoplanigraph bridge was transferred to the nine lens photography from the single lens photography and was used to supplement the field identified horizontal control.

Hand templets of nine lens photographs were drawn on vinylite and corrected for paper distortion and transforming errors by use of master templet No. 59741.

Horizontal control stations identified in the area were plotted and checked. The pass points located by stereoplanigraph bridge in flights of single lens photographs to the west and which were common to the nine lens photographs were also plotted and checked.

The manuscripts were joined together by matching at the neat lines and the templets were oriented.

Excellent intersections of radials were obtained and all identified horizontal was held. A few of the pass points located in the previous stereoplanigraph bridge plots were discarded because they could not be identified with certainty on the nine lens photographs.

23. Adequacy of Control:

The identified horizontal control was adequate.

24. Supplemental Data:

Stereoplanigraph Bridge Control Extension for Strip 8. Refer to Special Report, Photogrammetric Plot, Puget Sound, Washington (1960) by Willard A. Kuncis.

25. Photography:

The photography was adequate except for definition which was poor in many instances. Images appearing on the paper field prints did not appear on the cronarpaque office prints. This made it quite difficult to transfer a few sub stations from field photographs to office prints and many pass points from contact prints to office prints.

Approved:

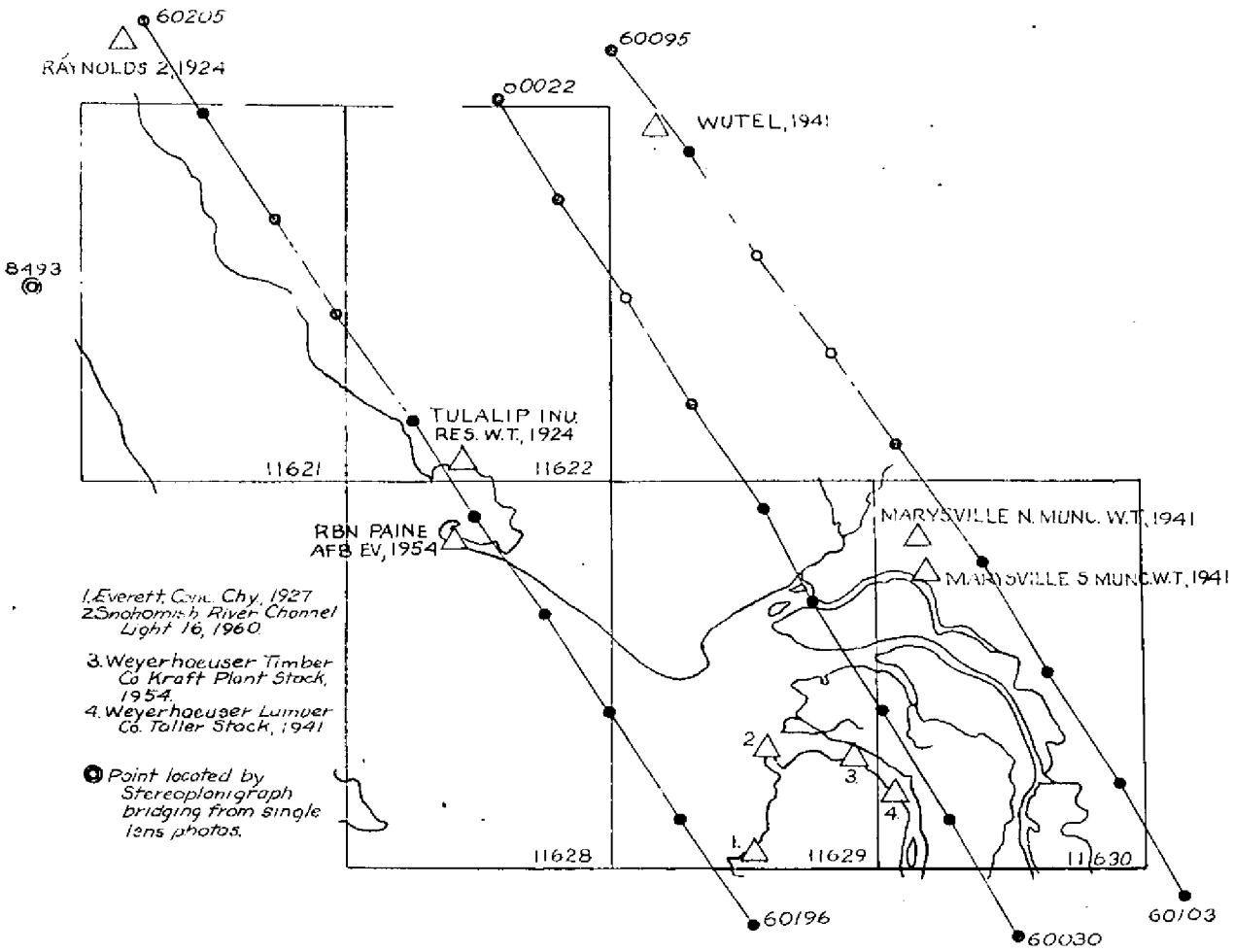
Fred Natella

Fred Natella, CAPT, C&GS
Portland District Officer

Respectfully submitted:

J. Edward Deal

J. Edward Deal
Cartographer



RADIAL PLOT (NINE LENS PHOTOS) PROJECT 5905

FORM 164
(4-23-54)

U.S. DEPARTMENT OF COMMERCE · COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT CONTROL RECORD

MAP T- 11621 PROJECT NO. Ph-5905 SCALE OF MAP 1:10,000 SCALE FACTOR None

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR y-COORDINATE / LONGITUDE OR x-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)
SOUCAM, 1954	Wash.N.	N.A.	394,098.54	4098.54	(901.46)		1249.2	(274.8)		
	P-269	1927	1,624,658.59	4658.59	(341.41)		1419.9	(104.1)		
SUSAN 2, 1924	Office	"	404,227.40	4227.40	(772.60)		1288.5	(235.5)		
R.M. 1	Comp.		1,631,368.83	1368.83	(3631.17)		417.2	(1106.8)		

1 FT. = .3048006 METER

COMPUTED BY: J.L.H. DATE 9-22-60 CHECKED BY: J.E.D. DATE 10-10-60

COMM-DC-57843

12.

COMPILATION REPORT

Map Manuscript T-11621

Project Ph-5905

31. Delineation:

The planimetry along the southwest shoreline of Port Susan was compiled by Kelsh Instrument and that along the northeast shoreline was compiled by graphic methods from nine-lens photographs. Infrared photography was also available in this area and it was made simultaneously with the nine-lens photography.

Some roads leading to waterfront facilities were not classified by field inspection.

Two marsh areas were not indicated by field inspection.

These features were delineated and compiled after careful stereoscopic study of the photographs assisted by reference to the U.S.G.S. Tulalip quadrangle.

32. Control:

Horizontal control was adequate.

33. Supplemental Data:

Map of Island County, Washington, Scale 1" = 1 Mile, Compiled by Island County Engineer, March 1958.

34. Contours and Drainage:

Contours are not applicable.

No drainage was indicated by field inspection and none is shown in this area on the U.S.G.S. Tulalip, Washington, quadrangle.

35. Shoreline and Alongshore Details:

The mean high-water line was spot located by field inspection and delineated during compilation

Along the Camano Island shoreline the limits of the foreshore areas as seen on photography taken at 3.0 ft. above M.L.L.W. are compiled.

Along the northwest shoreline of Port Susan foreshore areas could not be determined because the photography was taken at mean high-water. Numerous notes have been shown indicating the character of the foreshore.

No approximate low-water or shoal lines are shown.

36. Offshore Details:

Refer to the Descriptive Report for T-11617 (1960).

37. Landmarks and Aids:

None.

38. Control for Future Surveys:

None.

39. Junctions:

Satisfactory junctions were made with T-11616 on the north, T-11620 on the west, T-11622 on the east and T-11627 on the south.

Items 40, 46 and 47:

Refer to the Descriptive Report for T-11627 (1960).

Approved: Respectfully Submitted:

Fred Natella J. Edward Deal

Fred Natella, CAPT, C&GS
Portland District Officer

J. Edward Deal
Cartographer

49. Notes to the Hydrographer:

None.

T - 11621

COMPILATION RECORD	COMPLETION DATE	REMARKS
1. Alongshore area for hydro.	Feb. 28, 1961	
4. Interior details added. Compilation complete.	Sept. 21, 1961	

Form T-2

PHOTOGRAMMETRIC OFFICE REVIEW

T. 11621

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) None 7. Photo hydro stations None 8. Bench marks None 9. Plotting of sextant fixes None 10. Photogrammetric plot report X 11. Detail points X

ALONGSHORE AREAS

(Nautical Chart Data)

12. Shoreline X 13. Low-water line None 14. Rocks, shoals, etc. X 15. Bridges None 16. Aids to navigation None 17. Landmarks None 18. Other alongshore physical features X 19. Other alongshore 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. D.N.Williams — Reviewer; J.Edward Deal — 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:

M-2623-12

48. Geographic Names:

Camano Island

Cummings Lake

McKees Beach

Port Susan

Spee-Bi-Dah

Sunny Shores

Tulalip Indian Reservation

Tulalip Shores

Tulare Beach

Geographic Names Section
8 February 1963

Review Report
Shoreline Surveys
T-11617 through T-11622
January 1964

61. General Statement

There are six (6) 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-1164	1:10,000	1870
T-1388a	1:10,000	1872
T-1682	1:20,000	1885
T-1775	1:20,000	1886
T-1994	1:20,000	1888

These surveys agree with subject manuscripts as well as could be expected under consideration of the time interval. These map manuscripts are to supersede the above listed surveys of common areas for nautical charting.

63. Comparison with Maps of Other Agencies

Freeland	1:24,000	1953
Langely	1:24,000	1953
Tulalip	1:24,000	1956

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

64. Comparison with Contemporary Hydrographic Surveys

H-8609	1:10,000	1960
H-8699	1:10,000	1961

Shoreline and control of the subject surveys was furnished prior to the hydrography and as no changes of importance have been made there is good agreement.

65. Comparison with Nautical Charts

6448	1:40,000	1935 revised to 1962
6450	1:80,000	1961 revised to 1963
1845.C.	1:80,000	1963

There are no differences of importance between the charts and the manuscripts.

66. Accuracy of Results and Future Surveys

These surveys were prepared according to project instructions, and are within the required accuracy for nautical charting.

Reviewed by:

L. C. Lande

L. C. Lande

Approved by:

Chief, Photogrammetric Branch

Chief, Nautical Chart Division

M E Natto

Chief, Photogrammetry Division
Acting

FORM C&GS-8352
(3-25-63)

NAUTICAL CHART DIVISION

RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. T-11621

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	8-20-65	G.R. Johnson	Full ~~Part Before~~ After ~~Verification~~ Review ~~Inspection~~ Signed Via
			Drawing No.
18441	4/24/80	R.A. Lillie 5-29-80-RCL	Full ~~Part Before~~ After Verification Review Inspection Signed Via
			Drawing No. 49
18423	2/23/81	D. C. Larson 3-17-81 DCL	Full ~~Part~~ Before After Verification Review Inspection Signed Via
			Drawing No. 21
18440	3/12/81	D. C. Larson 3-17-81 DCL	Full ~~Part Before~~ 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.
			Full Part Before After Verification Review Inspection Signed Via
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