

00022

00022

<p>Form 504 U. S. DEPARTMENT OF COMMERCE COAST AND GEODETIC SURVEY</p> <h2 style="text-align: center;">DESCRIPTIVE REPORT</h2>	
<p>Type of Survey <u>Chart Topography</u></p>	
<p>Field No. <u>PH-6804</u> Office No. <u>TP-00022</u></p>	
<p>LOCALITY</p>	
<p>State <u>Washington</u></p>	
<p>General locality <u>Snake River</u></p>	
<p>Locality <u>Lower Monumental Pool</u></p>	
<p><u>19 68-70</u></p>	
<p>CHIEF OF PARTY</p>	
<p><u>Richard H. Houlder</u></p>	
<p>LIBRARY & ARCHIVES</p>	
<p>DATE _____</p>	

ESSA FORM 76-36a (2-70)		U.S. DEPARTMENT OF COMMERCE ENVIRONMENTAL SCIENCE SERVICES ADMIN. COAST AND GEODETIC SURVEY		TYPE OF SURVEY <input checked="" type="checkbox"/> ORIGINAL <input type="checkbox"/> REVISED		SURVEY TP - <u>00022</u> JOB PH - <u>6804</u>	
DESCRIPTIVE REPORT - DATA RECORD				FOR REVISED SURVEY USE ONLY			
PHOTOGRAMMETRIC OFFICE <u>Rockville, Maryland</u>				ORIGINAL SURVEY DATA:		JOB PH - _____ DATES: 19 ____ TO 19 ____	
OFFICER-IN-CHARGE <u>Richard H. Houlder</u>							
I. INSTRUCTIONS DATED							
1. OFFICE				2. FIELD			
from Marine Chart Division April 3, 1968 Aerotriangulation Jan. 8, 1969 Office July 17, 1969				Field June 25, 1968 Field Supplement I Aug. 21, 1968			
II. DATUMS							
1. HORIZONTAL: <input checked="" type="checkbox"/> 1927 NORTH AMERICAN				OTHER (Specify)			
2. VERTICAL: <input type="checkbox"/> MEAN HIGH-WATER <input type="checkbox"/> MEAN LOW-WATER <input type="checkbox"/> MEAN LOWER LOW-WATER <input checked="" type="checkbox"/> MEAN SEA LEVEL				OTHER (Specify) Normal Pool Level 540 ft. MSL			
3. MAP PROJECTION <u>Mercator</u>				4. GRID(S)			
5. SCALE <u>1:10,000</u>				STATE <u>Washington</u>		ZONE <u>South</u>	
				STATE		ZONE	
III. HISTORY OF OFFICE OPERATIONS							
OPERATIONS				NAME		DATE	
1. AEROTRIANGULATION BY METHOD: <u>Analytic</u> LANDMARKS AND AIDS BY				<u>I. I. Saperstein</u>		<u>Aug. 1969</u>	
2. CONTROL AND BRIDGE POINTS PLOTTED BY METHOD: <u>Coradi</u> CHECKED BY				<u>P. J. Dempsey</u>		<u>Sept. 1969</u>	
				<u>J. P. Battley</u>		<u>" "</u>	
3. STEREOSCOPIC INSTRUMENT PLANIMETRY BY COMPILATION CHECKED BY INSTRUMENT: <u>B-8</u> CONTOURS BY SCALE: <u>1:10,000</u> CHECKED BY				<u>J. P. Battley</u>		<u>Sept. 1969</u>	
4. MANUSCRIPT DELINEATION PLANIMETRY BY CHECKED BY METHOD: <u>Inked</u> CONTOURS BY CHECKED BY SCALE: <u>1:10,000</u> HYDRO SUPPORT DATA BY CHECKED BY				<u>M. C. Webber</u>		<u>Sept. 1969</u>	
				<u>M. C. Webber</u>		<u>Sept. 1969</u>	
5. OFFICE INSPECTION PRIOR TO FIELD EDIT BY				<u>J. P. Battley</u>		<u>Feb. 1970</u>	
6. APPLICATION OF FIELD EDIT DATA BY				<u>M. C. Webber</u>		<u>June 1970</u>	
				<u>J. P. Battley</u>		<u>June 1970</u>	
7. COMPILATION SECTION REVIEW BY				<u>J. P. Battley</u>		<u>Sept. 1969</u>	
8. FINAL REVIEW BY				<u>J. P. Battley</u>		<u>June 1970</u>	
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH BY				<u>J. P. Battley</u>		<u>Aug. 1970</u>	
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH BY				<u>S. G. Gladden</u>		<u>Sept. 1970</u>	
11. MAP REGISTERED - COASTAL SURVEY SECTION BY							

COMPILATION SOURCES

1. COMPILATION PHOTOGRAPHY

CAMERA(S) "E" 6" focal length		TYPES OF PHOTOGRAPHY LEGEND		TIME REFERENCE	
TIDE STAGE REFERENCE <input type="checkbox"/> PREDICTED TIDES <input type="checkbox"/> REFERENCE STATION RECORDS <input type="checkbox"/> TIDE CONTROLLED PHOTOGRAPHY		(C) COLOR X (P) PANCHROMATIC (I) INFRARED		ZONE <input type="checkbox"/> STANDARD MERIDIAN <input type="checkbox"/> DAYLIGHT	
NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE	
68-E(C)-6745 thru 6748	7-1-68	14:41	1:20,000	Inapplicable	
1:10,000 ratio	9-8-69				
69-E(C)-2255 thru 2258		11:46	1:20,000		
69-E(C)-2269 thru 2271		11:55			

REMARKS

2. SOURCE OF MEAN HIGH-WATER LINE:

Normal pool level, 540 ft. MSL located by office interpretation from color photography dated July 1, 1968.

VERIFIED - FIELD EDIT, MARCH - APRIL 1970

3. SOURCE OF MEAN LOW-WATER OR MEAN LOWER LOW-WATER LINE:

4. CONTEMPORARY HYDROGRAPHIC SURVEYS (List only those surveys that are sources for photogrammetric survey information.)

SURVEY NUMBER	DATE(S)	SURVEY COPY USED	SURVEY NUMBER	DATE(S)	SURVEY COPY USED

5. FINAL JUNCTIONS			
NORTH	EAST	SOUTH	WEST
No contem. survey	TP-00023 TP-00024	No contem. survey	TP-00021

REMARKS

HISTORY OF FIELD OPERATIONS TP-00022

I. FIELD INSPECTION OPERATION FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	R. B. Melby	March-April 1970
2. HORIZONTAL CONTROL RECOVERED BY ESTABLISHED BY PRE-MARKED OR IDENTIFIED BY		
3. VERTICAL CONTROL RECOVERED BY ESTABLISHED BY PRE-MARKED OR IDENTIFIED BY		
4. LANDMARKS AND AIDS TO NAVIGATION RECOVERED (Triangulation Stations) BY LOCATED (Field Methods) BY IDENTIFIED BY	L. L. Riggers	" "
5. GEOGRAPHIC NAMES INVESTIGATION TYPE OF INVESTIGATION <input type="checkbox"/> COMPLETE BY <input type="checkbox"/> SPECIFIC NAMES ONLY <input type="checkbox"/> NO INVESTIGATION		
6. PHOTO INSPECTION CLARIFICATION OF DETAILS BY	L. L. Riggers	" "
7. BOUNDARIES AND LIMITS SURVEYED OR IDENTIFIED BY		

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED		2. VERTICAL CONTROL IDENTIFIED	
PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION

3. PHOTO NUMBERS (Clarification of details)
69-E-2256 69-E-2257
69-E-2270

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED

L. L. Riggers

PHOTO NUMBER	OBJECT NAME	PHOTO NUMBER	OBJECT NAME
69-E-2255	CHEW LT 20		
69-E-2255	DAVIN LT 21		
69-E-2256	PERRY LT 22		
69-E-2257	PERRY LT 24		
69-E-2258	JOHN LT 25		

5. GEOGRAPHIC NAMES: REPORT NONE 6. BOUNDARY AND LIMITS: REPORT NONE

7. SUPPLEMENTAL MAPS AND PLANS

8. OTHER FIELD RECORDS (Sketch books, etc. DO NOT list data submitted to the Geodesy Division)

RECORD OF SURVEY USE

I. MANUSCRIPT COPIES

COMPILATION STAGES			DATE MANUSCRIPT FORWARDED	
DATA COMPILED	DATE	REMARKS	MARINE CHARTS	HYDRO SUPPORT
Shoreline planimetry bathymetric contours and land contours	Sept. 1969	Advance Man. Forwarded to	April 1970	
Field Edit Applied	June 1970			

II. LANDMARKS AND AIDS TO NAVIGATION

1. REPORTS TO MARINE CHART DIVISION, NAUTICAL DATA BRANCH

NUMBER	CHART LETTER NUMBER ASSIGNED	DATE FORWARDED	REMARKS
4 pages	CL-886	7-21-70	

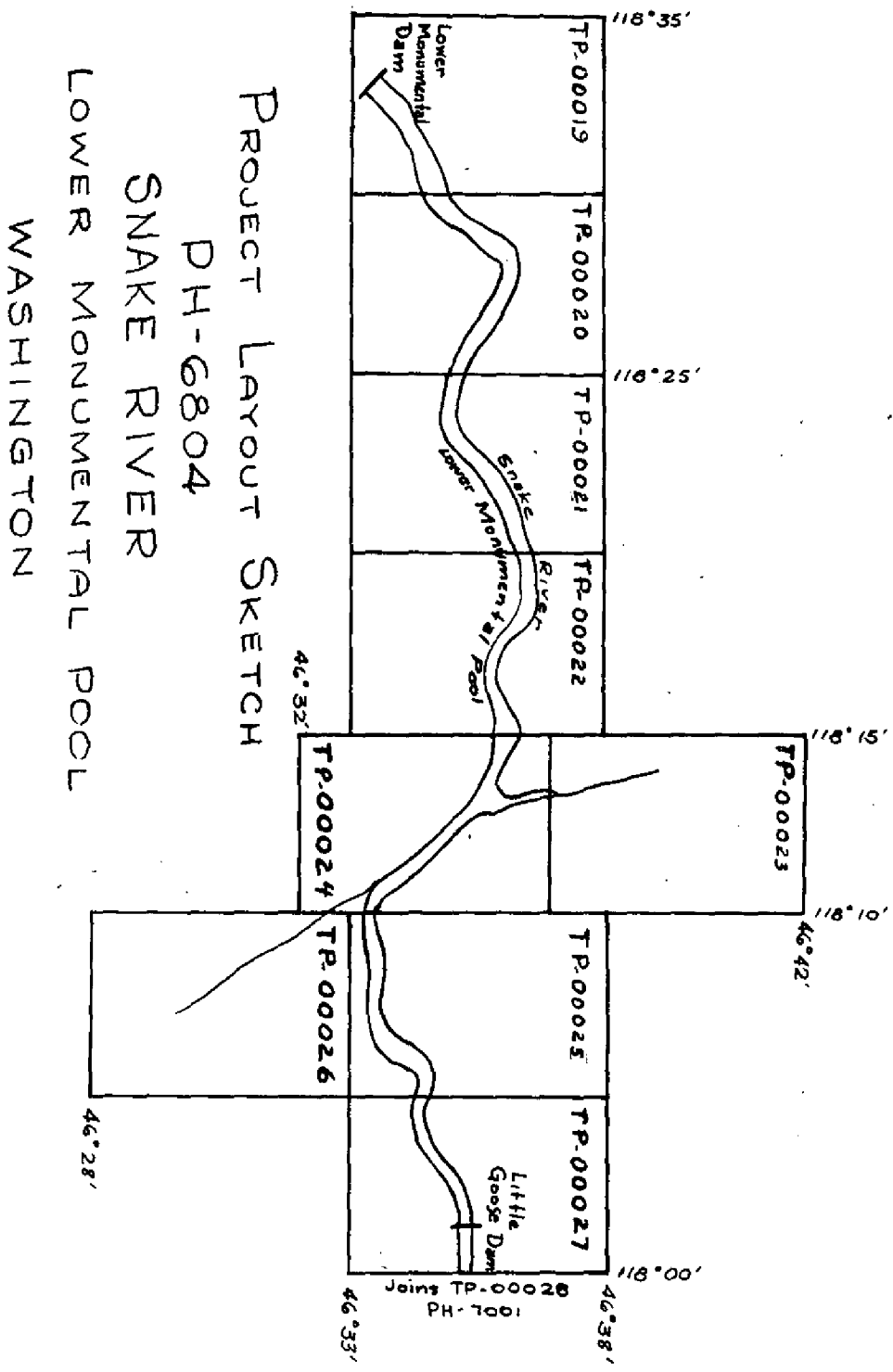
2. REPORT TO MARINE CHART DIVISION, COAST PILOT BRANCH. DATE FORWARDED: _____
3. REPORT TO AERONAUTICAL CHART DIVISION, AERONAUTICAL DATA SECTION. DATE FORWARDED: _____

III. FEDERAL RECORDS CENTER DATA

1. BRIDGING PHOTOGRAPHS; DUPLICATE BRIDGING REPORT; COMPUTER READOUTS.
2. CONTROL STATION IDENTIFICATION CARDS; FORM C&GS 567 SUBMITTED BY FIELD PARTIES.
3. SOURCE DATA (except for Geographic Names Report) AS LISTED IN SECTION II, ESSA FORM 76-36C.
ACCOUNT FOR EXCEPTIONS:
4. DATA TO FEDERAL RECORDS CENTER. DATE FORWARDED: Sept. 1970

IV. SURVEY REVISION (This section shall be completed when a revised survey is registered.)

FIRST REVISION	SURVEY NUMBER	JOB NUMBER	REMARKS
	TP - (2)	PH -	
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	
SECOND REVISION	SURVEY NUMBER	JOB NUMBER	REMARKS
	TP - (3)	PH -	
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	
THIRD REVISION	SURVEY NUMBER	JOB NUMBER	REMARKS
	TP - (4)	PH -	
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	



PROJECT LAYOUT SKETCH
DH-6804
SNAKE RIVER
LOWER MONUMENTAL POOL
WASHINGTON

-6-

Summary to Accompany
Descriptive Reports TP-00019
through TP-00027
PH-6804
June 1970

This project consists of nine chart topography manuscripts, covering the Lower Monumental Dam and Pool area on the Snake River, Washington. The manuscripts were compiled at a scale of 1:10,000 to provide the base for a new small-craft route chart, (683-SC), scale 1:20,000.

The Lower Monumental Pool was formed by impounding the water behind Lower Monumental Dam east to the Little Goose Dam.

Field operations prior to bridging included the premarking of horizontal control, selecting, photoidentifying and determining elevations of photogrammetric vertical control points, identifying and determining the elevation of features critical for charting and a geographic names investigation. This was completed in November 1968.

Bridging of the entire Pool area was completed in August 1969 by the analytical aerotriangulation method. 1:40,000 scale color diapositives were bridged and numerous points common to the 1:20,000 scale compilation photography were obtained to control these models.

Compilation was accomplished in the Washington Office in August-September 1969 utilizing 1:20,000 scale color photography taken July 1, 1968, prior to the flooding of the pool area. The normal pool level after flooding was established at 540 ft. above MSL. The river level for the area prior to flooding was approximately 440 ft. above MSL at the Lower Monumental Dam to 530' in the vicinity of Little Goose Dam. The area between the prescribed normal pool level and the prior river level was contoured on the B-8 stereoplotter at intervals compatible with required depth curves, (3', 6', 9', 12', 18', etc.) and were supplemented with spot elevations (soundings) to define shoals, gentle slopes and deep water. Rigid vertical and horizontal accuracy was maintained during compilation to comply with project instructions. Along with this bathymetry, the required chart compilation features were delineated above the 540 ft. normal pool level shoreline. This included the 600 ft. contour line for use by marine charts in correlating the compilation with existing maps.

Field edit was completed in April 1970 and encompassed the verification and/or location of aids to navigation and landmarks, a facility survey and verification of compiled features.

The application of field edit revisions and additions was completed in June 1970 for the entire project. Final review was also completed in June.

Advance copies prior to field edit had been supplied to the Small Craft Branch of the Marine Chart Division. Field edit corrections and/or additions were minimal and this afforded the Small Craft Branch more "lead time" to compile new route Chart 648-SC. Final copy will be sent to Marine Chart Division along with the facilities report.

A Registration Manuscript Copy will be registered in the Bureau Archives under their respective TP-numbers.

Submitted by,

Jeter P. Battley Jr.

J. P. Battley, Jr.

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Photogrammetric Plot Report
Job PH-6804
Snake River, Lower Monumental Pool
Washington

August 1969

21. Area Covered

This report covers the Snake River from the Lower Monumental Dam to the Little Goose Dam, consisting of nine (9) 1:10,000 scale sheets, TP-00019 thru TP-00027.

22. Method

Eight (8) strips were bridged using analytical aerotriangulation methods. Strips 1 and 2 were 1:40,000 scale color diapositives and strips 3 thru 8 were 1:20,000 scale color diapositives. Strips 1 and 2 were bridged using premarked control. The control does not appear on the 1:20,000 scale photographs as the photography was flown prior to premarking. Numerous tie points were located from the 1:40,000 scale bridge to control the 1:20,000 scale photography.

The attached sketch of the strips bridged shows the placement of triangulation used in the final strip adjustments. All bridge points are on Washington South Zone plane coordinates and converted to Mercator values.

23. Adequacy of Control

All horizontal control was premarked and was adequate to control the 1:40,000 scale bridge. The field party furnished elevations to vertically control each strip of 1:20,000 scale photographs and proved very adequate.

24. Photography

The definition and quality of the RC-8 "E" photography were good. No difficulty was encountered in the bridging of any strip.

Respectfully submitted,

I. I. Saperstein
I. I. Saperstein

Approved and forwarded,

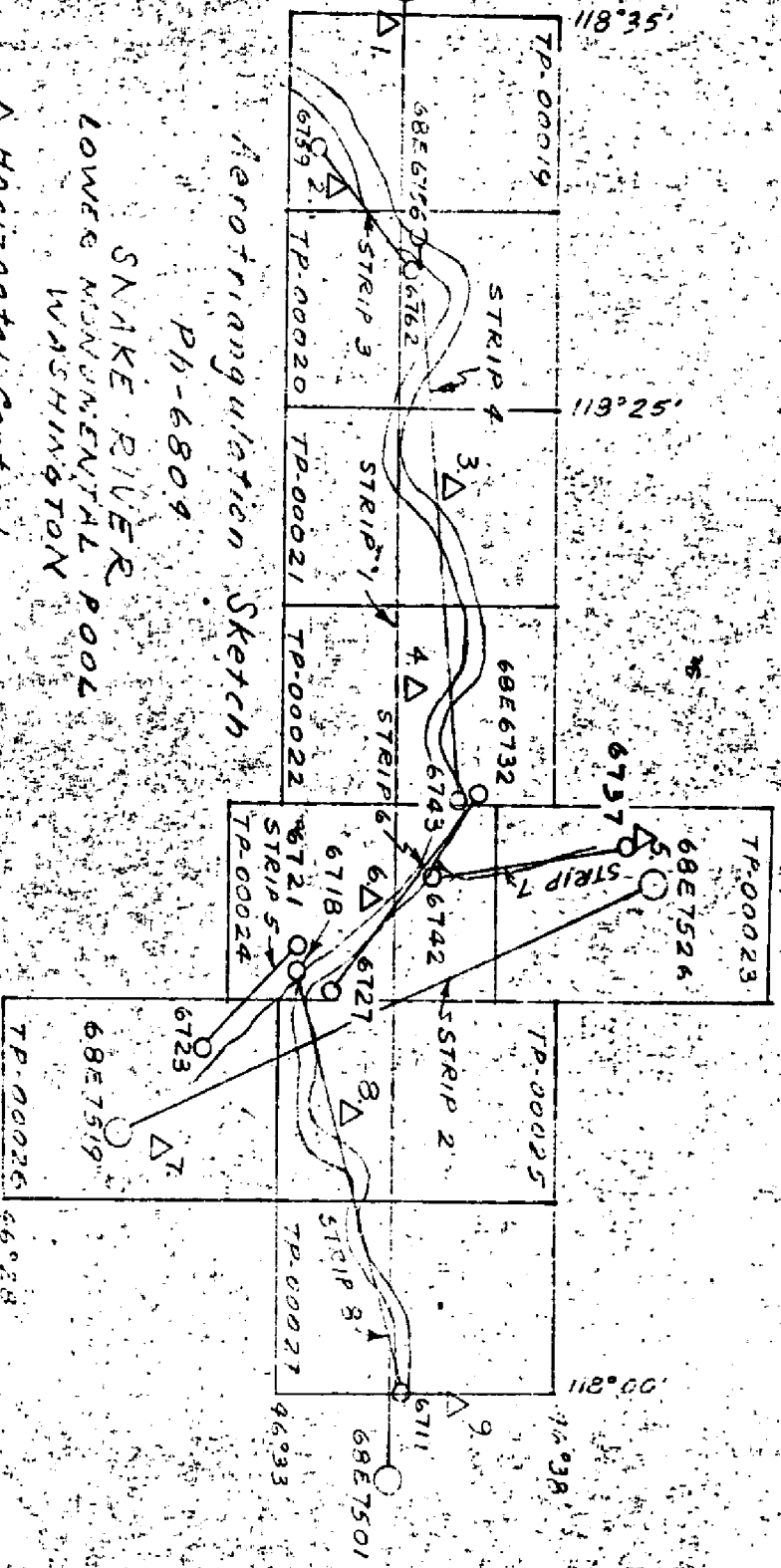
Henry P. ...
Chief, Aerotriangulation
Section

Snake River
Lower Monumental Pool
Washington

Ph-6809

Aerotriangulation Sketch

- △ Horizontal Control
- 1:40,000 scale color photographs
- 1:20,000 scale color photographs



- HUNT, 1933
- HEADER (USE) 1957
- AYERS, 1946
- PERCY, 1946
- PASCALLS, 1968
- TUCANDON, 1946
- S.P. BMZ 541 (USE) 1961
- RIPARIA, 1946
- SCHMIDT, 1946

COMPILATION REPORT
TP-00022

Refer to Descriptive Report No. TP-00019 for Field Inspection and Photogrammetric Plot Report. *all reports included in this Descriptive Report JB 8-4-70*

31. Delineation

TP-00022 is a 1:10,000 scale chart compilation manuscript.

Color photography, scale 1:20,000 taken July 1, 1968, was bridged and used for delineation. This photography was supplemented with 1:20,000 scale color photography taken in Sept. 1969 after the Lower Monumental Pool was flooded. 1:10,000 scale ratio prints were compared with the inked manuscript and additions or revisions were made.

A cronaflex copy and ozalid copies were ordered for this manuscript for field edit use.

After field edit is applied 1/2 reductions will be made for chart compilation at 1:20,000 scale.

32. Control

All horizontal control was premarked and adequate in density and placement.

Vertical control was of prime importance for this project as the area contoured is to be used for bathymetry (depth curves, etc.).

Excellent vertical accuracy was achieved in the bridge from numerous field identified vertical points.

(See Photogrammetric Plot Report.)

33. Supplemental Data

None used in photogrammetric compilation.

34. Contours and Drainage

Color photography at 1:20,000 scale was bridged by analytic methods and used in the B-8 stereoplotter for contouring. This photography taken in July 1968, before the pool area was flooded was of good quality and contours within the required accuracy (± 2 feet) were obtained.

Contours were drawn at prescribed intervals from the old river shoreline (440 feet) to 537 ft. These intervals were: 3 ft. from 540 ft. shoreline to 534 ft. contour (6' depth curve) 6 ft. intervals from 534 ft. to 510 ft. (30' depth curve) and 10 ft. intervals to the old river level.

In areas of congestion the 534 ft. and the 522 ft. (6' and 18' depth curves) were given preference and contoured without feathering. The 540 ft. elevation was contoured as the shoreline at normal pool level.

35. Shoreline and Alongshore Details

The shoreline was delineated as stated in paragraph 34. Color photography of Sept. 1969 taken after the Lower Monumental Pool was flooded was ratioed and compared with the contoured shoreline. Minor differences were noted and revised.

36. Offshore Detail

No comment.

37. Landmarks and Aids

A U. S. Coast Guard Civil Engineering blueprint was furnished for location of Aids to Navigation. This was used to help locate the Aids on the 1969 ratioed photographs. A few of the Aids could not be located and will have to be located during field edit.

38. Control for Future Surveys

None

39. Junctions

Junctions were made with TP-00021 to the west and TP-00024 to the east are in agreement.

40. Horizontal and Vertical Accuracy

Refer to Paragraph No. 23 of Photogrammetric Plot Report, also Paragraph No. 32 of this report.

41. thru 45.

Inapplicable

46. Comparison with Existing Maps

Comparison has been made with USGS Quadrangle HAAS, Washington, scale 1:62,500, dated 1950, contour interval 40 ft.

Compilation instructions state that all detail and the 600 ft. and 700 ft. contours that have been changed above the 540 ft. pool level should tie into the existing quadrangles. Areas of change were compiled and this tie made. *Comparison was made with C. of E. drawings, 1:6000 scaled - dated Feb 1963.*

47. Comparison with Nautical Charts

No charts exists in this area.

This is a new chart compilation for Chart No. 683-SC.

Respectfully submitted,

John C. Richter

John C. Richter
Cartographer

Approved and Forwarded,

K. N. Maki

K. N. Maki
Chief, Compilation Section

June 24, 1970

GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-680A (Washington)
TP-00022

Ayer *
Fields Gulch
Northern Pacific Railroad +
Union Pacific Railroad ✓

Approved by:

A. J. Wraight
A. J. Wraight
Chief Geographer

Prepared by:

Frank W. Pickett
Frank W. Pickett
Cartographic Technician

* This name falls on TP-00021.
+ Feature not compiled

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FIELD EDIT REPORT
Chart Topography
Lower Monumental Pool
Snake River, Washington
Map Manuscripts TP-00019 through TP-00027

This report covers the portion of the Snake River impounded by the Lower Monumental Dam, and entirely within the State of Washington.

The entire shoreline was inspected by vehicle or small boat. The shoreline and alongshore features were compared with the field edit copies of the map manuscripts (discrepancy prints) and/or the field edit color photographs.

The field edit copies (discrepancy prints) of the map manuscripts were used as the index for the field corrections and the numbers of the photographs used for such corrections appear on the discrepancy prints.

Adequacy of Compilation

The extent and accuracy of the maps appear to be reasonably complete, considering the compilation was without the benefit of field inspection.

As the river passes through a definite gorge, cliffs and bluffs are in evidence throughout the project area. The most salient cliffs were indicated as features of landmark value.

There are so few buildings in the area, that nearly every shoreline cultural feature is of landmark value. Along the railroad are located two small communities, Ayer and Riparia. They are the residences of the railroad maintenance and service personnel.

Several recreation areas are found along the shoreline and are in various stages of development. Usually they consist of a surfaced launching ramp, a float and comfort facilities.

All fixed aids to navigation were field checked and photo identified except Tucannon River Light 34, which was located by traverse methods, due to its location on the north slope of a cliff.

All landmarks were investigated. All landmarks, recommended for charting, have been listed on form 567.

Purple ink was used to indicate corrections on the discrepancy prints. Red tempera ink was used for the annotations on the field edit photographs. Green ink was used to indicate deletions.

Rocks and shoals were investigated. The elevations of the tops of these features were determined in the field.

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All entries for aids to navigation and landmarks for charts have been hand lettered in ink on Form 567. The smooth copies of the Form 567 can be prepared and submitted to the appropriate sections after the positions of the aids and landmarks have been finalized by the compilation section.

Geographic Names are the subject of a separate report.

A small craft chart facility investigation was completed in the field, concurrent with the field edit. Entries were made on the discrepancy prints.

Sheet TP-00019

Lower Monumental Dam and surfaced ramp are found on this sheet.

Sheet TP-00020

All fixed aids to navigation were investigated and photo-identified. A secondary, dirt road of landmark value is found near the east edge of the sheet.

Sheet TP-00021

A landmark for charts in the form of a tank is found on this sheet, also the railroad community of Ayer.

Sheet TP-00022

Heights of rocks and shoreline corrections were made on this sheet.

Sheet TP-00023

No field edit entries.

Sheet TP-00024

The highway bridge over the Snake River near the mouth of the Palouse River has been completed. It is a fixed span structure. The cofferdam that was constructed around the Marmes Rockshelter failed to save the rockshelter due to uncontrolled seepage. At present a pond is formed in the rockshelter area behind the cofferdam. Two overhead cable crossings and a submerged pipeline crossing are found on this sheet.

Sheet TP-00025

The railroad community of Riparia is found on this sheet. The Project Engineer, Seattle District, Corps of Engineers reported the abandoned piers of the old Riparia railroad bridge were removed to the depths (elevations) that appear on photograph 69E 2302. The masonry bridge abutments are scheduled to remain in place. A landmark in the form of an elevated water tank is found at Riparia.

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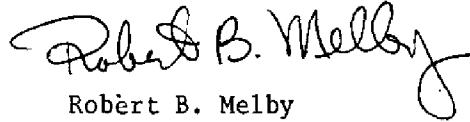
Sheet TP-00026

At Powers a grain elevator and storage tank was compiled as tanks only.

Sheet TP-00027

Corrections of the area adjacent to the Little Goose Dam including the northsection (earth fill portion) of the dam, road relocation and an overhead power line should be applied to the manuscript from recent photography that reflects the above changes.

Respectfully Submitted,



Robert B. Melby
Chief, Field Party, PMC

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Review Report
TP-00022
PH-6804
June 1970

61. General Statement

See summary in Preface.

62. Comparison with Registered Topographic Surveys

None

63. Comparison with Maps of Other Agencies

Comparison was made with 1:62,500 scale quadrangles HAAS, Washington, dated 1950 and Starbuck, Washington, dated 1948. These maps were used to compare planimetric features adjacent to the river, as a base for a geographic names verification and to assure correlation between the compiled 600 ft. contour, (the first index contour above the shoreline), and the G.S. topography. Comparison was also made with Corps of Engineers Reservoir Maps compiled in 1957. These maps were used to locate the approximate position of lights for subsequent photoidentification.

64. Comparison with Contemporary Hydrographic Surveys

None - this is a newly formed pool area of the Snake River.

65. Comparison with Nautical Charts

None

66. Adequacy of Results and Future Surveys

This survey complied with project instructions and excellent results were realized in maintaining the required vertical accuracy for the compiled contours and spot elevations to be used as hydrography. The survey meets the National Standards of Accuracy.

67. Geographic Names

A thorough geographic names verification was made by the 1968 field inspection party and approved by the

67. Geographic Names (continued)

Geographic Names Branch. A names list is included in this report.

Reviewed by,

Jeter P. Battley Jr

Approved by,

Charles L. Lamer
Chief, Photogrammetric Branch¹⁰

R. H. Howland
Chief, Photogrammetry Division

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

TO BE CHARTED
~~TO BE REVISED~~
~~TO BE DELETED~~ } STRIKE OUT TWO

I recommend that the following objects which have ~~been~~ been inspected from seaward to determine their value as landmarks be charted on ~~(deleted from)~~ the charts indicated.
The positions given have been checked after listing by Lyle L. Riggers

Seattle, Washington 7 April 1970

R. B. Melby Chief of Party

STATE	CHARTING NAME	DESCRIPTION	LIGHT OR DAY MARK	POSITION		DATUM	METHOD OF LOCATION AND SURVEY NO.	DATE OF LOCATION	CHART NO.	CHART NO.	CHART NO.	CHARTS AFFECTED
				LATITUDE N	LONGITUDE W							
Washington				46 35	118 17	N.A.	Air Photo					
	PERRY Lt 22			46 35	118 17	1927	TP00022					
	PERRY Lt 24			46 35	118 16	"	"					
	JOHN Lt 25			46 35	118 16	"	"					
	STEAMBOAT BEND Lt 27			46 36	118 14	"	TP00024					
	STEAMBOAT BEND Lt 28			46 35	118 14	"	"					
	PALOUSE RIVER Lt 29			46 35	118 12	"	"					
	TUCANNON Lt 30			46 34	118 11	"	"					
	TUCANNON RIVER Lt 32			46 35	118 10	"	"					
	TUCANNON RIVER Lt 34			46 35	118 09	"	"					
	HUNTERS Lt 35			46 35	118 08	"	"					
	TEXAS Lt 37			46 33	118 06	"	"					
	TEXAS Lt 38			46 33	118 06	"	"					
	ALKALI FLAT CREEK Lt 39			46 34	118 05	"	"					
	RIPARIA Lt 40			46 34	118 05	"	"					

This form shall be prepared in accordance with Hydrographic Manual, Publication 20.2, Sec. 1-35, 2-39, 6-36, 7-18 to 22 inclusive, and Fig. 79. Positions of charted landmarks and nonfloating aids to navigation, if determined, shall be reported on this form. Revisions shall show both the old and new positions. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

Seattle, Washington

7 April 1970

TO BE CHARTED
~~70-98-REVISED-~~
~~70-98-DELETED~~ } STRIKE OUT TWO

I recommend that the following objects which have ~~been~~ been inspected from seaward to determine their value as landmarks be charted on ~~(deleted from)~~ the charts indicated.

The positions given have been checked after listing by Lyle L. Riggers

R.B. Melby

Chief of Party

STATE	WASHINGTON	CHARTING NAME	DESCRIPTION	Light Signal No.	POSITION				METHOD LOCATION SURVEY NO.	DATE OF LOCATION	HARBOR CHART	NEARSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
					LATITUDE °	LONGITUDE °	D.M. MINUTES	D.P. MINUTES						
			McGUIRE RING RR Lt	1988 91	46 34	75 27	118 04	071.7	N.A.	Air Photo				
			McGUIRE RING FRT Lt	1968 89	46 34	78 2	118 04	619.	"	"				
			McGUIRE Lt 41	1968 93	46 34	10 20.7	118 04	143.6	"	"				
			McGUIRE Lt 43	1968 95	46 34	15 05.3	118 02	279.9	"	"				

This form shall be prepared in accordance with Hydrographic Manual, Publication 20.2, Sec. 1-35, 2-39, 6-36, 7-18 to 22 inclusive, and Fig. 79. Positions of charted landmarks and nonfloating aids to navigation, if redetermined, shall be reported on this form. Revisions shall show both the old and new positions. The data should be considered as the charts of the area and not by individual field survey sheets. Inform under each column heading should be given.

USCGM-PC

NONFLOATING ~~BEES OR~~ LANDMARKS FOR CHARTS

TO BE CHARTED
~~TO BE REVISED~~
~~TO BE DELETED~~ } STRIKE OUT TWO

Seattle, Washington

7 April 1970

I recommend that the following objects which have ~~been~~ been inspected from seaward to determine their value as landmarks be charted on ~~charts~~ ~~from~~ the charts indicated.
The positions given have been checked after listing by Lyle L. Riggers

R B Melby

Chief of Party

STATE	CHARTING NAME	DESCRIPTION	SIGNAL NAME	POSITION				DATUM	METHOD OF LOCATION AND SURVEY NO.	DATE OF LOCATION	CHARTS AFFECTED		
				LATITUDE		LONGITUDE					NAVIC	HYDRO CHART	RESUR CHART
				D. M. SECONDS	"	D. M. SECONDS	"	D. M. SECONDS	"				
Washington	TANK	Ht = 25 (235) *		46 35.7	79 57.0	118 21.4	1 00 00	N. A.	Air Photo	5/31/70			
	TANK	Tank steel elevated Ht = 56 (122) *		46 34.7	136 5.0	118 05.5	01 18.0	"	"	3/5/70			
		* referenced to the normal pool level (SAO' MSL)											

This form shall be prepared in accordance with Hydrographic Manual, Publication 20.2, Sec. 1-35, 2-39, 6-36, 7-18 to 22 inclusive, and Fig. 79. Positions of charted landmarks and nonfloating aids to navigation, if redetermined, shall be reported on this form. Revisions shall show both the old and new positions. The data shall be considered the basis of the charts of the area and not by individual field survey sheets. Inform under each column heading should be given.
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