

00034

00034

Form 504	
U. S. DEPARTMENT OF COMMERCE	
COAST AND GEODETIC SURVEY	
DESCRIPTIVE REPORT	
Type of Survey	CHART TOPOGRAPHY
Field No. PH-7001	Office No. TP-00034
LOCALITY	
State	WASHINGTON
General locality	SNAKE RIVER
Locality	ILLIA
1969-70	
CHIEF OF PARTY	
LIBRARY & ARCHIVES	
DATE	

DESCRIPTIVE REPORT - DATA RECORD

TYPE OF SURVEY

☒ ORIGINAL☐ REVISED

SURVEY TP - 00034

JOB PH - 7001

PHOTOGRAMMETRIC OFFICE

Washington Science Center
Rockville, Maryland

OFFICER-IN-CHARGE

Richard H. Houlder

FOR REVISED SURVEY USE ONLY

ORIGINAL
SURVEY DATA:

JOB PH -

DATES:

19 To 19

I. INSTRUCTIONS DATED

1. OFFICE

2. FIELD

Chart Specifications Sept. 10, 1969
Aerotriangulation Feb. 10, 1970
Compilation March 11, 1970Aug. 8, 1969
Oct. 6, 1969

II. DATUMS

1. HORIZONTAL:

☒ 1927 NORTH AMERICAN

OTHER (Specify)

2. VERTICAL:

☐ MEAN HIGH-WATER
☐ MEAN LOW-WATER
☐ MEAN LOWER LOW-WATER
☐ MEAN SEA LEVEL

OTHER (Specify)

Normal pool level 635 feet MSL

3. MAP PROJECTION

Mercator

4. GRID(S)

STATE

ZONE

Washington

South

5. SCALE

1:10,000

STATE

ZONE

III. HISTORY OF OFFICE OPERATIONS

OPERATIONS		NAME	DATE
1. AEROTRIANGULATION	BY	I.I. Saperstein	June, 1970
METHOD: Analytical	LANDMARKS AND AIDS BY		
2. CONTROL AND BRIDGE POINTS	PLOTTED BY	P.J. Dempsey	May, 1970
METHOD: Coradi	CHECKED BY		
3. STEREOSCOPIC INSTRUMENT	PLANIMETRY BY	J.C. Richter	June, 1970
COMPILATION	CHECKED BY		
INSTRUMENT: B-8	CONTOURS BY	J.C. Richter	June, 1970
SCALE: 1:10,000	CHECKED BY		
4. MANUSCRIPT DELINEATION	PLANIMETRY BY	J.C. Richter	July, 1970
	CHECKED BY		
METHOD: Inked	CONTOURS BY	J.C. Richter	July, 1970
	CHECKED BY		
SCALE: 1:10,000	HYDRO SUPPORT DATA BY		
	CHECKED BY		
5. OFFICE INSPECTION PRIOR TO FIELD EDIT	BY	J.P. Battley, Jr.	July, 1970
6. APPLICATION OF FIELD EDIT DATA	BY	J.C. Richter	Jan., 1971
	CHECKED BY		
7. COMPILATION SECTION REVIEW	BY	J.P. Battley, Jr.	Mar., 1971
8. FINAL REVIEW	BY	J.P. Battley, Jr.	Mar., 1971
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH	BY		
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH	BY		
11. MAP REGISTERED - COASTAL SURVEY SECTION	BY		

COMPILATION SOURCES

1. COMPILATION PHOTOGRAPHY

CAMERA(S) "L" 6" focal length		TYPES OF PHOTOGRAPHY LEGEND (C) COLOR (P) PANCHROMATIC (I) INFRARED		TIME REFERENCE	
TIDE STAGE REFERENCE <input type="checkbox"/> PREDICTED TIDES <input type="checkbox"/> REFERENCE STATION RECORDS <input type="checkbox"/> TIDE CONTROLLED PHOTOGRAPHY				ZONE	<input type="checkbox"/> STANDARD
				MERIDIAN	<input type="checkbox"/> DAYLIGHT
NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE	
69-L(C)-1551 thru 1557	8-5-69	9:40	1:20,000	Inapplicable	
69-L(C)-1697 thru 1705	8-5-69	11:29	1:10,000	Inapplicable	
Corp of Engineers W70-5-131 thru 138	4-16-70	14:02	1:12,000	Inapplicable	
69-L(C)-1975 thru 1983	8-6-69	10:58	1:40,000	Inapplicable	
69-L(C)-1992 thru 2001	8-6-69	11:19	1:40,000	Inapplicable	

REMARKS

2. SOURCE OF MEAN HIGH-WATER LINE:

Normal pool level 635 feet MSL located by office interpretation from color photography dated August, 1969.

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

Inapplicable

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
	TP-00035		

REMARKS

HISTORY OF FIELD OPERATIONS

I. ☒ FIELD INSPECTION OPERATION☒ FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	R.B. Melby	11-25-69
2. HORIZONTAL CONTROL	RECOVERED BY R.B. Melby, E. Pursel, Jr. ESTABLISHED BY PRE-MARKED OR IDENTIFIED BY R.B. Melby, E. Pursel, Jr.	July, 1969
3. VERTICAL CONTROL	RECOVERED BY ESTABLISHED BY PRE-MARKED OR IDENTIFIED BY R.B. Melby	Aug., 1969
4. LANDMARKS AND AIDS TO NAVIGATION	RECOVERED (Triangulation Stations) BY LOCATED (Field Methods) BY R.B. Melby IDENTIFIED BY	AUG-Sept, 70
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION <input checked="" type="checkbox"/> COMPLETE BY R. B. Melby <input type="checkbox"/> SPECIFIC NAMES ONLY <input type="checkbox"/> NO INVESTIGATION	March, 1970
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY R.B. Melby	Aug., 1970
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
69-L-1997	BRYAN, 1946	69-L-1552 69-L-1553 69-L-1554	VP-52 VP-53 VP-54

3. PHOTO NUMBERS (Clarification of details)

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED

Corp of Engineers photographs

PHOTO NUMBER	OBJECT NAME	PHOTO NUMBER	OBJECT NAME
W70-5-132	Little Goose Reservoir Lt. 34		
W70-5-134	Little Goose Reservoir Lt. 37		
W70-5-135	Little Goose Reservoir Lt. 38		
W70-5-140	Little Goose Reservoir Lt. 40		

5. GEOGRAPHIC NAMES: ☒ REPORT ☐ NONE6. BOUNDARY AND LIMITS: ☐ REPORT ☐ NONE

7. SUPPLEMENTAL MAPS AND PLANS

C. of E. map area drawings, C.G. proposed aid site drawings.

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 Contours	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

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: _____

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

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

Summary to Accompany Descriptive Reports
TP-00028 through TP-00035
PH-7001
March 1971

This project consists of eight chart topography manuscripts, covering the Little Goose 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, (684-SC), scale 1:20,000.

The Little Goose Pool was formed by impounding the water behind Little Goose Dam east to Lower Granite Dam. PH-6804 (683-SC) junctions this project at the Little Goose Dam (TP-00027).

Field operations prior to bridging included the premarking of horizontal control, selecting, photo-identifying, and determining elevations of photogrammetric vertical control points, identifying and determining the elevation of features critical for charting and geographic names investigation. This was completed in November 1969.

Bridging of the entire Pool area was completed in May 1970, by the analytical aerotriangulation method. Two strips of 1:40,000 scale color photography were bridged, providing control for five strips of 1:20,000 scale color plates. Some of the pre-marked stations also appeared on the 1:20,000 scale compilation photography.

1:10,000 scale color was available to more accurately contour a few flat areas. Field vertical control points were located in some instances on this photography.

Compilation was accomplished in the Washington Office in May - June 1970. Compilation photography was the bridged 1:20,000 scale color taken August 5, 1969, prior to the flooding of the pool area. Project specifications at the start of compilation indicated a planned normal pool level for the area to be 638' above MSL, with a maximum level of 646.5'. B-8 instrument compilation soon revealed that this would result in the new railroad bed being underwater in several places. This was confirmed in consultation with the Corps of Engineers, Walla Walla District, and a revised normal pool level of 635' above MSL was established with a maximum level of 638 feet. (See

Field Edit Instructions, paragraph 6, dated July 28, 1970.) The river level for the area prior to flooding was approximately 540 feet above MSL in the vicinity of Little Goose Dam, to 610 feet in the vicinity of Lower Granite 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 requirements. Along with this bathymetry, the required chart compilation features were compiled above the 635' shoreline. This included the 700 foot contour for use by marine charts in correlating the compilation with existing maps and to indicate areas of change.

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

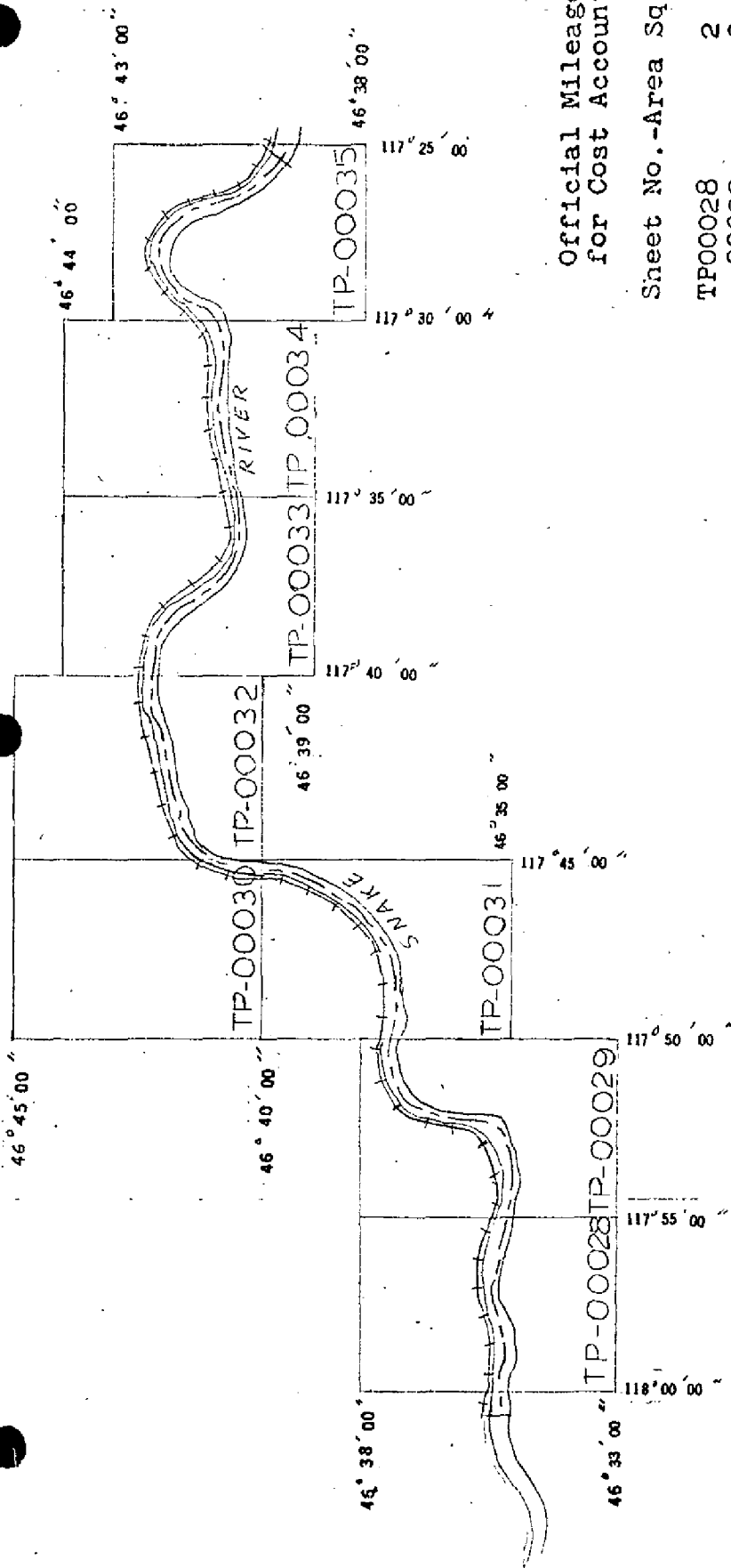
The application of field edit revisions and additions was completed in January 1971, for the entire project. 1:12,000 scale C of E panchromatic photography was submitted with field edit data. These photographs were taken after the pool area was filled, and were used to verify compilation and position flights. Final review was completed in March 1971.

1:20,000 scale reductions were supplied to the Marine Charts Division prior to final registration. The facilities located during field edit were coded to the Facilities Report on these copies, and the report submitted with the reductions. Areas where the originally compiled contours, (Hydrography), are suspect due to new construction were pin-pointed for Marine Charts disposition. (See the Review Reports).

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

Submitted by:

Jeter P. Battley, Jr.



Official Mileage
for Cost Accounts

Sheet No.-Area Sq.Mi.

TP00028	2
00029	3
00030	3
00031	1
00032	2
00033	2
00034	2
00035	3
Total	18

JOB PH-7001

SNAKE RIVER
LITTLE GOOSE POOL
WASHINGTON

CHART TOPOGRAPHY

SCALE 1:10000

FIELD INSPECTION REPORT

Project PH-7001

Little Goose Pool, Snake River, Washington

September - November 1969

2. Areal Field Inspection:

The project area is a section of the Snake River that will be impounded by the Little Goose Dam, forming a navigable pool and the lands adjacent to the pool.

The river passes through a generally steep, rocky gorge with numerous basaltic bluffs. The tops of the bluffs give way to open, rolling prairies which in a large part are cultivated, dry land grain fields.

The area is sparsely populated, except for an occasional railroad station or farmhouse.

The area is traversed by a line of the Camas Prairie Railroad, along the north shore of the river. The old Central Ferry highway bridge is being replaced by a newer and higher span.

3. Horizontal Control

Horizontal control requirements consisted of paneling of preselected triangulation stations. The panels were the conventional, white, opaque, polyethylene material, cut to conform to the specifications for the pre-marking of control stations. All of the stations paneled were bureau triangulation stations. At the request of several of the property owners the panels were removed after the completion of the aerial photography. All of the panels were still in place and in good condition when the field personnel revisited each station site to remove the paneling material. It was not necessary to establish any additional horizontal control.

Form 152, Control Station Identification cards were submitted for each station paneled. All of the paneled stations were in open areas and no difficulty should be encountered due to trees or shadows caused by bluffs.

4. Vertical Control

Vertical control consisted of the determination by the usual field methods of the elevations of preselected, photogrammetric, vertical control points. These points are indicated on the field photographs with the prefix "VP" and numbering system, coinciding with the last two digits of the aerial photograph number, with a sketch of the feature on the reverse side of the photographs.

Critical elevation features, such as rocks, boulders, hilltops, etc., that are found in the range of 510 to 548 feet above mean sea level in the proposed pool area were identified on the field photography and their elevations were determined by field methods. In some instances, the field elevations of suspected critical elevation features did not fall within the critical range. Nevertheless they were photo-identified and their elevations inked on the photography.

The critical elevation features were indicated on the field photography with the prefix "C.E.P.-" a sequential number, field determined elevation and a brief description.

Several supplemental elevations were determined in preselected areas that are generally flat or with a gentle gradient at or near the proposed high water line. These supplemental elevations were designated on the field photographs with the "X.V.P.-" prefix, a sequential number, a field elevation, and a sketch on the reverse side of their respective photograph.

All leveling was based on bench marks established by the Coast & Geodetic Survey, Corps of Engineers, and the U. S. Geological Survey. The elevations of all bench marks used as the basic control, has been previously established by differential, spirit leveling by the respective agencies.

5. Contours and Drainage

Contours only applicable to the compilation of depth curves for underwater topography, based on the field determination of preselected photogrammetric vertical control points.

7. Alongshore Features

The project instructions did not require field inspection, although four overhead power transmission line crossings have been indicated on the field photography.

13. Geographic Names

Geographic names are the subject of a separate report. As of this date (November 1969), the field investigation of geographic names had not been completed, so the report will be submitted at a later date.

14. Special Reports

The method of leveling used by the field party was the conventional trigonometric leveling with the Wild TIA theodolite and a stadia rod with a rod bubble to insure the verticality of the rod. The U. S. Geological Survey "Stadia Tables for Obtaining Differences in Elevations 9-1163" was used to compute the trigonometric differences in elevations.

In the more remote areas where the usual trigonometric leveling would be laborious and slow, the distance was determined by Electronic Distance Measuring Instruments (Electro chains) and observing reciprocal vertical angle observations between the points as well as to a nearby eccentric or auxilliary point to afford an elevation check.

The major difficulty encountered in the field was access to working grounds. There were few roads and this combined with the usual clearing of the pool area of obstructions and cultural features posed some hindrance to field operations.

Respectfully submitted,

Robert B. Melby

Robert B. Melby
Chief, PMC Photo Party

11/25/69

Photogrammetric Plot Report
Job PH-7001
Snake River, Little Goose Pool
Washington

June 1970

21. Area Covered

This report covers the area of Little Goose Dam and Pool on the Snake River, consisting of eight (8) 1:10,000 scale sheets, TP-00028 through TP-00035.

22. Method

Seven (7) strips of photography were bridged using analytical aerotriangulation methods. Strips 1 and 2 at a scale of 1:40,000 were bridged and used to control the entire project. Strips 3, 4, 6, 8 and 9 (1:20,000 scale color photography) were bridged using control located from Strips 1 and 2. Compilation points were dropped on Strips 4A and 5 from Strips 4 and 6 to control the models both horizontally and vertically. The 1:20,000 scale photography is to be used for compilation. The attached sketch of the strips bridged shows the placement and closure 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 bridges. Some of the pre-marked control also appeared on the 1:20,000 scale photography. The field party furnished elevations to vertically control each strip of 1:20,000 photographs and proved adequate.

-2-


24. Photography

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

Respectfully submitted,


I. I. Saperstein

Approved and forwarded,

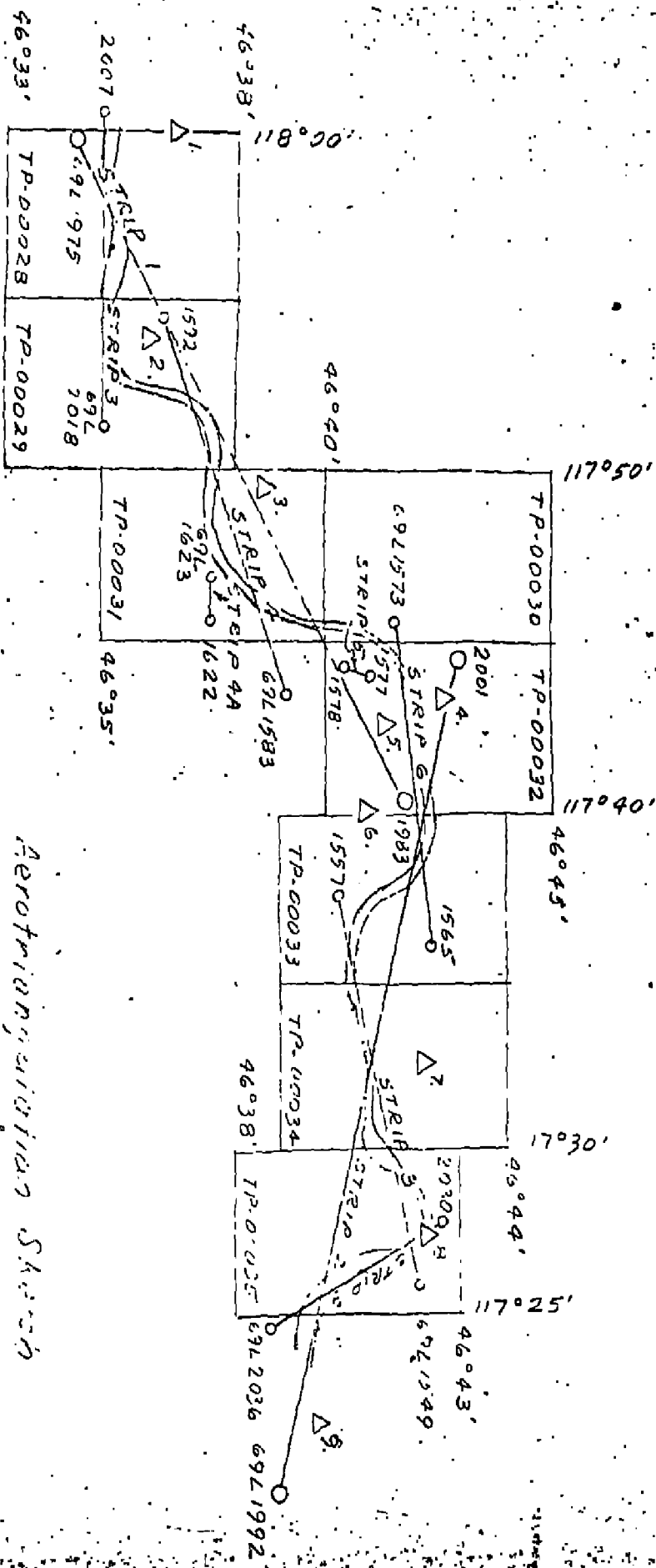

Henry P. Eichert
Chief, Aerotriangulation
Section

1. SUB. P. 500000, 1946 (0.0 -1.6)
2. RIDGPATH, 1946 (-1.8 +1.5)
3. COX, 1946 (+1.0 -1.7)
4. PENNANAWANA, 1946 (0.0 -1.6)
5. RILEY, 1945 (-1.5 -1.4)
6. PLYG, 1946 (-1.4 +1.5)
7. BEYAN, 1946 (+1.0 +1.5)
8. SUB. P. ALMOTA, 1945 (-1.3 -1.7)
9. TRAMWAY, 1945 (+1.6 +1.4)

Horizontal Control
 01. 90,000 scale aerial photographs
 02. 20,000 scale vertical photographs
 () Closest control in feet

Snake River
 Little Goose Pool
 Washington

Aeromagnetic Sketch
 PH-7001



COMPILATION REPORT
TP-00034

31. Delineation

Color photography scale 1:20,000, dated August 1969, were bridged and used for delineation. The normal pool level is compiled at 635 feet MSL. The Camas Prairie Railroad is still under construction on the east side of the manuscript, and will be checked during field edit or later photography. Field inspection on photograph No. 69-L-1553 indicates an area that is being graded to a lower level. It should be verified during field edit to what level this was graded by consulting the Corps of Engineers and also the areas further east. A cronaflex copy and ozalid copies were ordered for this manuscript for field edit use. After field edit is applied, $\frac{1}{2}$ 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

Corps of Engineer photographs at scale 1:12,000, dated April 1970, after the pool was filled, were used for comparison. A few minor differences were noted, but the pool elevation was 637 feet at time of photography.

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. Photography taken in August 1969, before the pool area was flooded, is of good quality, and contours within the required accuracy were obtained. Railroad construction was not completed at eastern edge of manuscript, and will have to be verified by field edit or later photography for change

in contours above pool level. Contours were drawn at prescribed intervals from the old river shoreline to 635 feet MSL (new shoreline).

Drainage -- no comment.

35. Shoreline and Alongshore Detail

The shoreline was delineated from color photography of August 1969, and compared with Corps of Engineer photographs at 1:12,000 scale, after the pool was filled, and is in good agreement.

36. Offshore Detail

No comment

37. Landmarks and Aids

U.S. Coast Guard Civil Engineering blueprints were furnished for location of Aids to Navigation, but at the time of compilation, no aids could be located, and will be located by field edit or later photography. Landmarks to be located by field edit.

38. Control for Future Surveys

None

39. Junctions

To the east with TP-00035 and to the west with TP-00033.

40. Horizontal and Vertical Accuracy

Refer to paragraph No. 23 of Photogrammetric Plot Report, and paragraph No. 32 of this report.

41. through 45.

Inapplicable

46. Comparison With Existing Maps

Comparison has been made with U.S.G.S. Quadrangle, Penawawa, Washington, Edition 1950, scale 1:62,500, contour interval 40 feet. Compilation instructions state that all detail and the 700 foot contour that have been changed above the 635

foot pool level should tie into the existing quadrangle.

47. Comparison With Nautical Charts

No chart exists in this area. This is a new chart compilation for chart 684-SC.

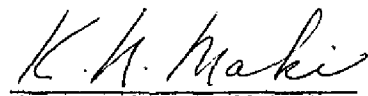
48. Geographic Names List

Camas Prairie RR
Illia
Schultz Bar
Snake River
Young Road

Respectfully submitted:


John C. Richter

Approved and forwarded:


K. N. Maki, Chief
Compilation Section

May 6, 1971

GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-7001 (Washington)

TP-00034

Camus Prairie Railroad

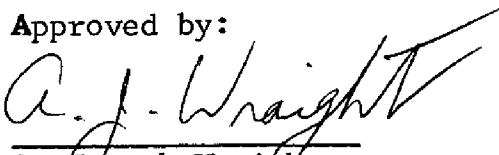
Illia

Schultz Bar

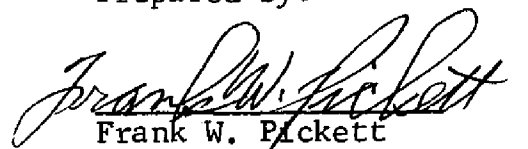
Snake River

Young Road

Approved by:


A. Joseph Wraight
Chief Geographer

Prepared by:


Frank W. Pickett
Cartographic Technician

Review Report TP-00034
Chart Topography
April 1971

61. General Statement

(See Summary in Preface.) 1:12,000 scale panchromatic photography, flown after the pool area was flooded, was obtained from the Corps of Engineers, Walla Walla District. Glass plates of these photographs were set in the B-8 stereoplotter for the positioning of aids to navigation and to compile the railroad that was under construction at the time of bridging photography. This required some revision to the compilation of the 635 foot shoreline (normal pool level), and to the 700 and 800 foot contour, due to grading.

62. Comparison With Registered Topographic Surveys

None

63. Comparison With Maps of Other Agencies

Comparison was made with USGS Quadrangle, Penawawa, Washington, 1950 Edition, scale 1:62,500, contour interval 40 feet. Corps of Engineer Drawings LGG 1-0-9/16 to LGG 1-0-9/29, scale 1:8333, dated 1957, contour interval 10 feet, were compared during compilation and review for accuracy of contours compiled.

64. Comparison With Contemporary Hydrographer Surveys

None

65. Comparison With Nautical Charts


None

66. Adequacy of Results and Future Surveys

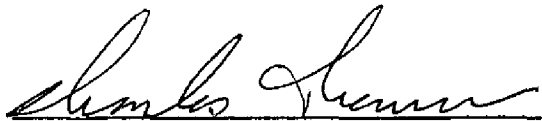
This map complies with the project instructions, and will provide an excellent base for new chart 684-SC.


The map complies with the National Standards of Accuracy.

Reviewed by:


Jeter P. Battley, Jr.

Approved by:


Charles Theurer
Chief, Photogrammetric Branch


Chief, Photogrammetry Division

SNAKE RIVER - LITTLE GOOSE POOL
WASHINGTON

U.S. DEPARTMENT OF COMMERCE
ENVIRONMENTAL SERVICES ADMINISTRATION
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT CONTROL RECORD

South Zone

SCALE FACTOR

SCALE OF MAP 1:10,000

PROJECT NO. PH-7001

MAP T-

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR Y COORDINATE LONGITUDE OR X COORDINATE	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS (1 Ft. = 3048006 meter) FORWARD (BACK)
BRYAN, 1946	PC's Pg 224	NA 1927	2,741,343.50	
PING, 1946	PC's Pg 224	NA 1927	2,710,722.92	
TRAMWAY, 1945	Pg 225	NA 1927	503,788.50	
ALMOTA, 1945	Pg 225	NA 1927	2,783,651.30	
Sub. Pt. ALMOTA, 1945	Comp	NA 1927	500,160.17	
RILEY, 1945	Pg 226	NA 1927	2,760,290.49	
SCHMIDT, 1946	Pg 226	NA 1927	514,006.72	
Sub. Pt. SCHMIDT, 1946	Comp	NA 1927	2,760,350.10	
PENNAWAHA, 1946	Pg 226	NA 1927	513,948.68	
RIDPATH, 1946	Pg 226	NA 1927	2,697,743.28	
COX, 1946	Pg 226	NA 1927	504,851.72	
CANYON, 1946	Pg 227	NA 1927	2,628,288.07	
			476,617.77	
			2,628,223.28	
			476,538.99	
			2,697,371.96	
			513,745.31	
			2,654,958.47	
			475,475.41	
			2,671,405.97	
			488,348.82	
			2,618,340.11	
			482,014.05	

COMPUTED BY

I.I.S.

DATE

2/20/70

CHECKED BY

DATE

2/24/70

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEYTO BE CHARTED
TO BE REVISED
TO BE DELETED

STRIKE OUT TWO

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

Seattle, Washington September 2, 1970

I recommend that the following objects which have *(have not)* 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 Lytle L. Riggers

Robert B. Melby

Chief of Party

STATE	CHARTING NAME	DESCRIPTION	SIGNAL NAME	POSITION							METHOD OF LOCATION AND SURVEY No.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
				LATITUDE *		LONGITUDE *										
				°	'	°	'	"								
				D. M. METERS	"	D. P. METERS										
Washington																
	Little Goose Reservoir Light 21	1969 39	46 41.5	26.9	117 45.1	3.8	N.A. TP-00030 PHOTO	8-14-70					684 SC			
	Little Goose Reservoir Light 22	1969 41	46 41.8	46.6	117 42.6	35.4	N.A. TP-00032 PHOTO	8-14-70					684 SC			
	Little Goose Reservoir Light 23	1969 43	46 42.1	2.8	117 42.7	40.3	N.A. TP-00032 PHOTO	8-14-70					684 SC			
	Little Goose Reservoir Light 24	1969 45	46 42.0	0.7	117 40.5	30.7	N.A. TP-00032 PHOTO	8-14-70					684 SC			
	Little Goose Reservoir Light 25	1969 47	46 43.3	17.6	117 40.4	18.6	N.A. TP-00032 PHOTO	8-14-70					684 SC			
	Little Goose Reservoir Light 26	1969 49	46 42.0	2.3	117 39.5	31.5	N.A. TP-00033 PHOTO	8-14-70					684 SC			
	Little Goose Reservoir Light 27	1969 51	46 42.2	11.0	117 39.2	14.4	N.A. TP-00033 PHOTO	8-14-70					684 SC			
	Little Goose Reservoir Light 28	1969 53	46 41.8	49.4	117 38.9	51.8	N.A. TP-00033 PHOTO	8-14-70					684 SC			
	Little Goose Reservoir Light 29	1969 55	46 40.8	50.5	117 37.4	20.6	N.A. TP-00033 PHOTO	8-13-70					684 SC			
	Little Goose Reservoir Light 31	1969 59	46 40.6	1559.0	117 36.9	439.0	N.A. TP-00033 PHOTO	8-13-70					684 SC			
	Little Goose Reservoir Light 32	1969 60	46 40.3	35.9	117 36.6	52.1	N.A. TP-00033 PHOTO	8-13-70					684 SC			
	Little Goose Reservoir Light 33	1969 61	46 40.6	1108.0	117 36.6	36.6	N.A. TP-00033 PHOTO	8-13-70					684 SC			
	Little Goose Reservoir Light 34	1969 63	46 40.6	20.2	117 33.9	26.7	N.A. TP-00033 PHOTO	8-13-70					684 SC			
	Little Goose Reservoir Light 37	1969 67	46 40.8	32.9	117 32.3	568.0	N.A. TP-00034 PHOTO	8-13-70					684 SC			
	Little Goose Reservoir Light 38	1969 69	46 40.8	35.9	117 32.3	55.4	N.A. TP-00034 PHOTO	8-13-70					684 SC			
	Little Goose Reservoir Light 39	1969 71	46 40.8	1109.0	117 32.3	1178.0	N.A. TP-00034 PHOTO	8-13-70					684 SC			
	Little Goose Reservoir Light 40	1969 73	46 40.8	50.1	117 32.3	14.9	N.A. TP-00034 PHOTO	8-13-70					684 SC			
	Little Goose Reservoir Light 41	1969 75	46 40.8	1547.0	117 32.3	316.0	N.A. TP-00034 PHOTO	8-13-70					684 SC			

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. 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 for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

* TABULATE SECONDS AND METERS