00030

00030

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-00030

LOCALITY

State WASHINGTON

General locality SNAKE RIVER

Locality MILLER BAR

19 69-70

CHIEF OF PARTY

LIBRARY & ARCHIVES

DATE

USCOMM-DC 5087

ESSA FORM 76-36a (2-70)

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

DESCRIPTIVE REPORT - DATA RECORD

TYPE OF SURVEY
[X] ORIGINAL
[ ] REVISED

SURVEY TP - 00030
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	Aug. 8, 1969
Aerotriangulation	Feb. 10, 1970	Oct. 6, 1969
Compilation	March 11, 1970	

II. DATUMS

1. HORIZONTAL: [X] 1927 NORTH AMERICAN — OTHER (Specify)

2. VERTICAL: [ ] MEAN HIGH-WATER [ ] MEAN LOW-WATER [ ] MEAN LOWER LOW-WATER [X] MEAN SEA LEVEL — OTHER (Specify): Normal pool level 635 feet MSL

3. MAP PROJECTION: Mercator

4. GRID(S): STATE: Washington; ZONE: South

5. SCALE: 1:10,000

III. HISTORY OF OFFICE OPERATIONS

OPERATIONS		NAME	DATE
1. AEROTRIANGULATION METHOD: Analytical	BY	I.I. Saperstein	May, 1970
	LANDMARKS AND AIDS BY		
2. CONTROL AND BRIDGE POINTS METHOD: Coradi	PLOTTED BY	P.J. Dempsey	May, 1970
	CHECKED BY		
3. STEREOSCOPIC INSTRUMENT COMPILATION	PLANIMETRY BY	J.H. Taylor	June, 1970
	CHECKED BY		
INSTRUMENT: B-8	CONTOURS BY	J.H. Taylor	June, 1970
SCALE: 1:10,000	CHECKED BY		
4. MANUSCRIPT DELINEATION	PLANIMETRY BY	J.C. Richter	June, 1970
	CHECKED BY		
METHOD: Inked	CONTOURS BY	J.C. Richter	June, 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		

ESSA FORM 76-36B
(2-70)

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

COMPILATION SOURCES

1. COMPILATION PHOTOGRAPHY

CAMERA(S): "L" 6" focal length

TIDE STAGE REFERENCE
- ☐ PREDICTED TIDES
- ☐ REFERENCE STATION RECORDS
- ☐ TIDE CONTROLLED PHOTOGRAPHY

TYPES OF PHOTOGRAPHY LEGEND
- (C) COLOR
- (P) PANCHROMATIC
- (I) INFRARED

TIME REFERENCE
ZONE
MERIDIAN
☐ STANDARD
☐ DAYLIGHT

NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE
69-L(C)-1572 thru 1573	8-5-69	9:55	1:20,000	Inapplicable
69-L(C)-1577 thru 1578	8-5-69	10:01	1:20,000	Inapplicable
69-L(C)-1729 thru 1735	8-5-69	11:50	1:10,000	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
Corps of Engineer (P). W70-5-107 thru 109	8-16-70	13:47	1:12,000	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:

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-00032	TP-00031	

REMARKS

ESSA FORM 76-36c
(2-70)

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

HISTORY OF FIELD OPERATIONS

1. [XX] FIELD INSPECTION OPERATION [XX] FIELD EDIT OPERATION

OPERATION		NAME	DATE
1. CHIEF OF FIELD PARTY		R.B. Melby	Nov., 1969
2. HORIZONTAL CONTROL	RECOVERED BY	R.B. Melby, E. Pursel, Jr.	July, 1969
	ESTABLISHED BY		
	PRE-MARKED OR IDENTIFIED BY	R.B. Melby, E. Pursel, Jr.	July, 1969
3. VERTICAL CONTROL	RECOVERED BY		
	ESTABLISHED BY	R.B. Melby	Aug., 1969
	PRE-MARKED OR IDENTIFIED BY		
4. LANDMARKS AND AIDS TO NAVIGATION	RECOVERED *(Triangulation Stations)* BY		
	LOCATED *(Field Methods)* BY	R.B. Melby	Aug-Sept 69
	IDENTIFIED BY		
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION [X] COMPLETE [ ] SPECIFIC NAMES ONLY [ ] NO INVESTIGATION — BY	R. B. Melby	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

PHOTO NUMBER	STATION NAME

2. VERTICAL CONTROL IDENTIFIED

PHOTO NUMBER	STATION DESIGNATION
69-L-1573 69-L-1572	VP-73A, VP-73B VP-72

3. PHOTO NUMBERS *(Clarification of details)*

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED

Corp of Engineers photographs

PHOTO NUMBER	OBJECT NAME
W70-5-107 W70-5-109	Little Goose Reservoir Lt. 20 Little Goose Reservoir Lt. 21

PHOTO NUMBER	OBJECT NAME

5. GEOGRAPHIC NAMES: [X] REPORT [ ] NONE

6. BOUNDARY AND LIMITS: [ ] REPORT [ ] NONE

7. SUPPLEMENTAL MAPS AND PLANS

Corp of Engineers 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)*

USCOMM-DC 46200-P70

ESSA FORM 76-36d
(2-70)

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

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.)*

	SURVEY NUMBER	JOB NUMBER	REMARKS
FIRST REVISION	TP - (2)	PH -	
	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	

USCOMM-DC 46200-P70

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.

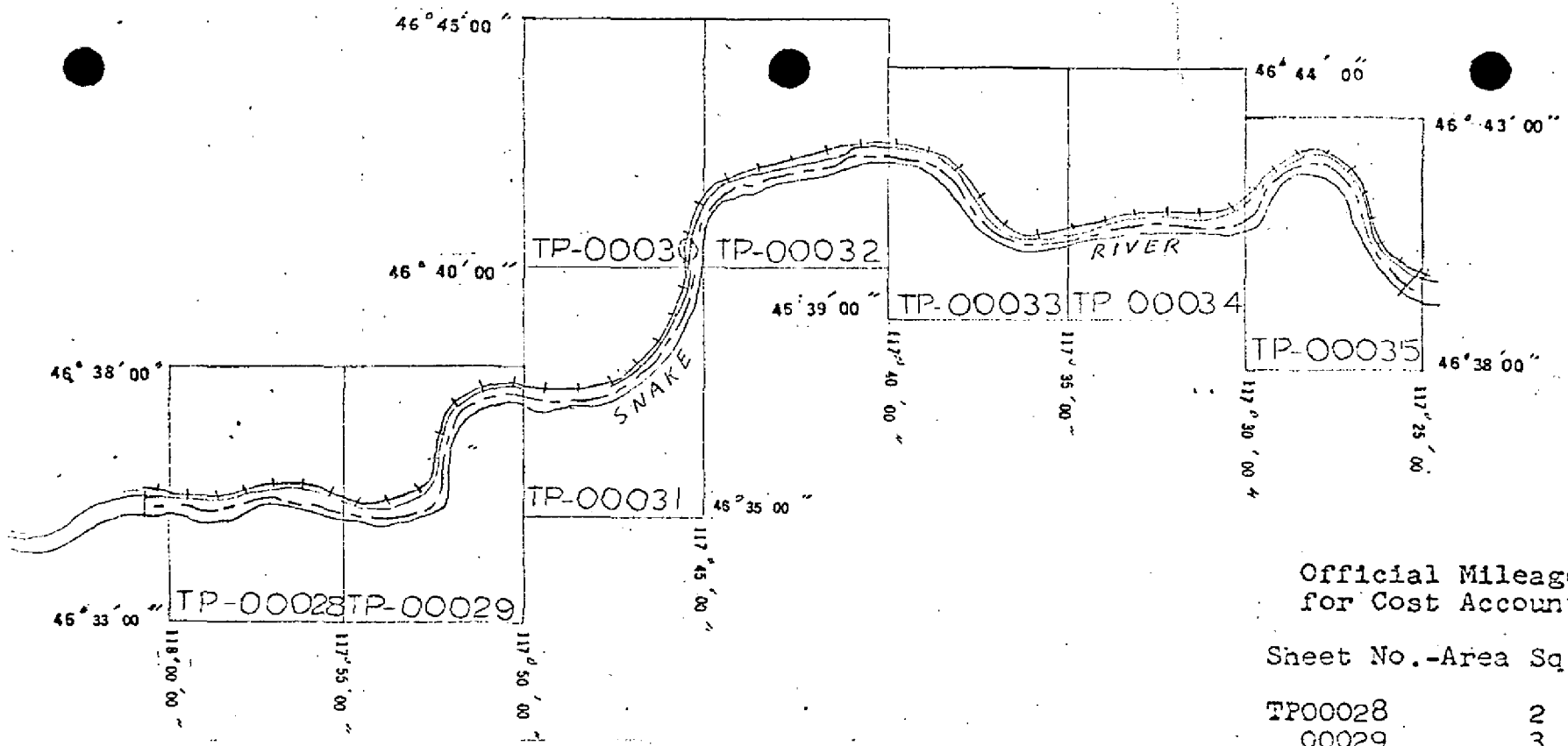
The application of field edit revisions and additions was completed in January 1971, for the entire project. 1:12,000 scale C of E panchromatic photography was submitted with field edit data. These photographs were taken after the pool area was filled, and were used to verify compilation and position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



JOB PH-7001

SNAKE RIVER
LITTLE GOOSE POOL
WASHINGTON

CHART TOPOGRAPHY

SCALE 1:10,000

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

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 premarking 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 premarked 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.

24. Photography

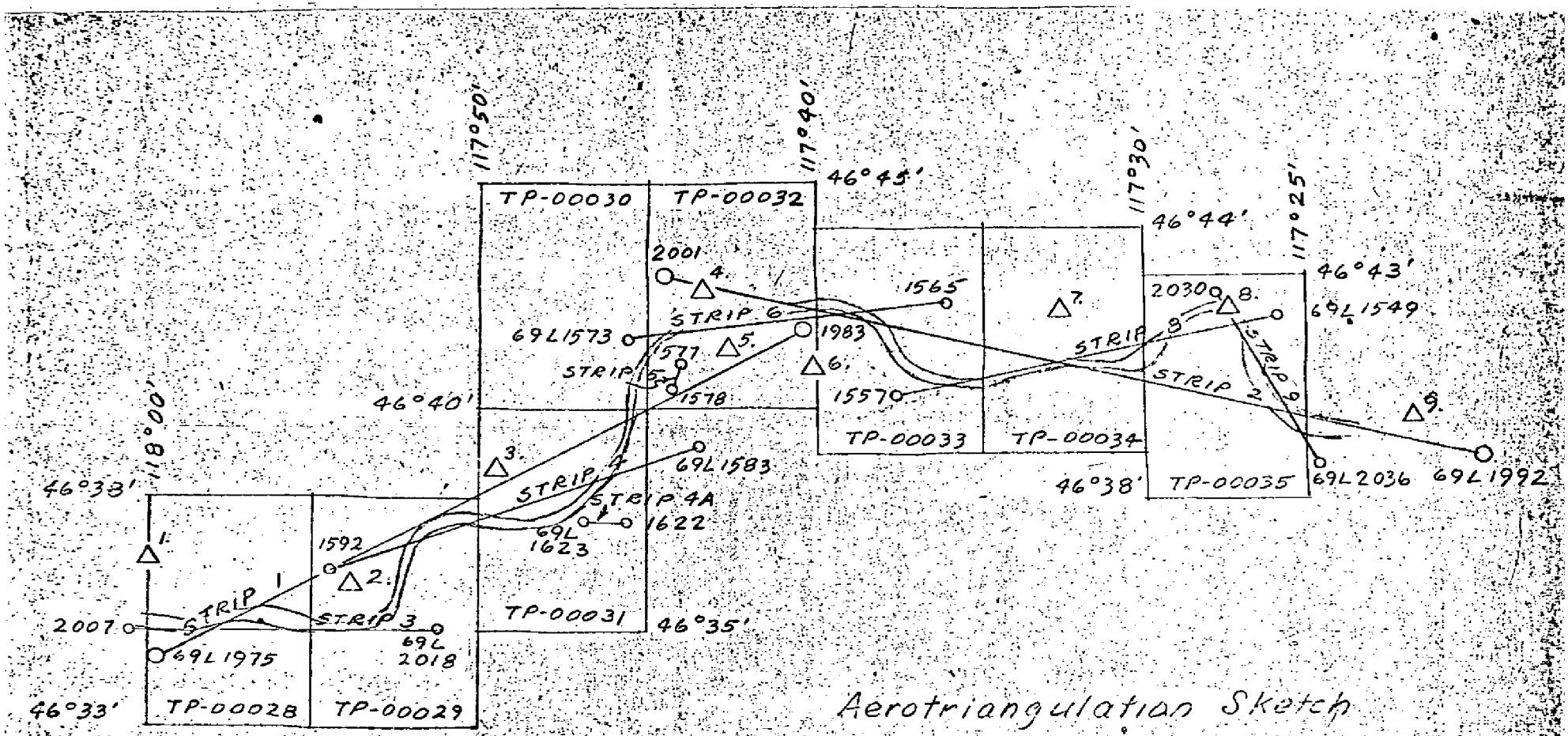
The definition and quality of the RC-8 "L" camera photography were good. No difficulty was encountered in the bridging of any strip.

Respectfully submitted,

I. I. Saperstein

Approved and forwarded,

Henry P. Eichert
Chief, Aerotriangulation Section



1. Sub. Pt. SCHMIDT, 1946 (0.0 -.6)
2. RIOPATH, 1946 (-.8 +1.5)
3. COX, 1946 (+1.0 -.7)
4. PENNAWANA, 1946 (0.0 -.6)
5. RILEY, 1945 (-.5 -.9)
6. PING, 1946 (-.4 +.5)
7. BRYAN, 1946 (+1.0 +1.5)
8. Sub. Pt. ALMOTA, 1945 (-1.3 -1.7)
9. TRAMWAY, 1945 (+.6 +.4)

Aerotriangulation Sketch
Ph-7001
SNAKE RIVER
LITTLE GOOSE POOL
WASHINGTON

△ Horizontal Control
○ 1:40,000 scale color photographs
○ 1:20,000 scale color photographs
( ) Closure to control in feet

COMPILATION REPORT
TP-00030

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 R.R. was not completed at time of compilation, but it looked like the grading was completed, so there may not be any changes when completed. 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 with TP-00028.)

33. Supplemental Data

Corps of Engineer photographs, scale 1:12,000, taken 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 the time of photography.

34. Contours and Drainage

Color photography at 1:20,000 scale was bridged by analytic method, and used in the B-8 stereoplotter for contouring. This photography, taken in August 1969, before the pool area was flooded, is of good quality, and contours within the required accuracy were obtained. 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 dated April 1970, scale 1:12,000, 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 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 south with TP-00031, and to the east with TP-00032.

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, Hay, Washington, Edition 1952, scale 1:62,500, contour interval 40 feet. Compilation instructions state that all detail and the 700 foot contour that have changed above the 635 foot pool level should tie into the existing quadrangle. In the northeast corner, the 800 and 900 foot contour changed, and was delineated.

47. Comparison With Nautical Charts

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

48. Geographic Names List

Camas Prairie

Cottonwood Canyon
Ferry River Road
Miller Bar
Snake River

Respectfully submitted:

John C. Richter

John C. Richter

Approved and forwarded:

K. N. Maki

K. N. Maki, Chief
Compilation Section

May 6, 1971

GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-7001 (Washington)

TP-00030

Camas Prairie (Railroad)

Cottonwood Canyon

Ferry River Road

Snake River

Miller Bar

Approved by:

A. Joseph Wraight
Chief Geographer

Prepared by:

Frank W. Pickett
Cartographic Technician

FIELD EDIT REPORT
CHART TOPOGRAPHY
LITTLE GOOSE POOL, SNAKE RIVER, WASHINGTON
August-September 1970
Map Manuscripts TP-00027 through TP-00035

This report covers the portion of the Snake River impounded by the Little Goose Dam and entirely within the State of Washington.

The entire shoreline was inspected by small boat. The shoreline and alongside features were compared with the field edit copies of the map manuscripts (discrepancy prints) and/or the Corps of Engineers, field, contact photographs.

The field edit copies (discrepancy prints) of the map manuscripts were used as the index for the field corrections and cross-referenced to the field photography.

Adequacy of Compilation:

The extent and accuracy of the maps appear to be reasonably complete.

As the river passes through a definite gorge, cliffs and bluffs are in evidence throughout the project area.

There are so few buildings along the shoreline, that nearly every shoreline cultural feature is of landmark value. Two small communities are found along the north shore of the river, Central Ferry and Almota. They are the residences of railroad maintenance personnel and grain storage and barge loading facilities.

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

The entire north shore at the river is traversed by a line of Camas Prairie Railroad. At Central Ferry a state highway crosses the river and except for a few secondary roads that terminate at the river's edge, there is limited access to the river.

All fixed aids to navigation were field checked and photo identified on the Corps of Engineer photography when possible. Aids that did not appear on the photography were located by sextant/theodolite fix or from the Corps of Engineers ground survey control. Only the bases of the towers of the fixed aids were in place at the time of the photo-field edit. The lighting mechanism and batteries were installed prior to the leaving of the field area by the field edit personnel.

All aids to navigation are listed on a field copy of form 567.

All landmarks were investigated and listed on a field copy of form 567.

Purple ink was used to indicate corrections on the discrepancy prints. Green ink was used to indicate deletions.

Rocks and shoals were investigated and the elevations of the tops of these features were determined by the field editor. Certain "humps" or "mounds" were compiled and contoured. The Corps of Engineers, Walla Walla District, stated all of the stockpiles of sand/gravel, etc., were removed to the normal ground elevation. If any of these areas still remain in doubt, it is suggested the Corps of Engineers, Walla Walla District be contacted as they probably have photography and/or contoured map sections of the areas in question prior to the flooding by the dam. This special photography was used to determine the progress and the amount of clearing performed by the clearing contractors.

Information pertinent to each manuscript will be discussed under each listed manuscript number.

TP-00027

Several "humps" of crushed rocks were reported to have been moved prior to the flooding by the Corps of Engineers. The airstrip east of the Little Goose Dam is still in operation. It was reported to have been constructed for use by the Corps of Engineers and construction contractors. It is unattended as of this date. The water tank located about 700 feet south of the west end of the airstrip has been removed. A surfaced boat ramp is found in the vicinity of the airstrip.

TP-00028

Two aids to navigation were located on this sheet.

TP-00029

Shoreline changes are reflected on Corps of Engineers photograph W70-5-76, in the vicinity of Light 5, also on photograph W70-5-82 about 3000 feet east of Light 8. The railroad relocation appears on the Corps of Engineers photography. The minutes of latitude along the west edge of the sheet are 10 minutes in error.

TP-00030

A feature compiled as a tower was deleted as the structure was of a temporary nature. The railroad has been relocated and construction is complete.

TP-00031

Near the west edge of the sheet are found several rectangular features that were former stockpiles of crushed rock, gravel, etc. The Corps of Engineers reported these stockpiles were removed prior to flooding. A public facility is found on photo W70-5-90. This feature is still under construction, but the ramp boat basin and comfort facilities have been completed. A new fixed span highway bridge has been constructed over the Snake River at Central Ferry. The old bridge located parallel to and along the downstream side of the new bridge was demolished in place and the steel structure was dumped into the river between the blown piers. See reports of demolition of the bridge by Corps of Engineers and U. S. Coast Guard with attached drawings, showing the elevations of the old piers and sunken steel bridge sections.

Two new grain storage and barge loading facilities are found on this sheet. Construction of these two facilities had commenced at the date of photography. Plot plans, ground survey and photo locations can aid in the location of the two facilities. Overhead Power Line clearances are submitted in the form of Corps of Engineers permits.

TP-00032

Shoreline changes are reflected on the Corps of Engineers photography. Specific photo numbers are referenced on the discrepancy print. The railroad has been relocated and it is presently in service. A surfaced boat launching ramp is found at the mouth of Penawawa Creek. All aids to navigation were photo-identified.

TP-00033

Shoreline changes have been indicated on the Corps of Engineers photography. Aids to navigation have been photo-identified. The railroad relocation and construction have been completed.

TP-00034

The two possible shoal areas have been reported by the Corps of Engineers, Walla Walla District, to have been graded to an elevation of 617 feet. See referenced Corps of Engineers drawings on Reservoir clearing. Shoreline changes have been indicated on the Corps of Engineers photography.

TP-00035

At the west edge of the sheet, a shoal area was reported to have been graded to an elevation of 617 feet by the Corps of Engineers, Walla Walla District. See U.S. E. Reservoir clearing drawing. At Almota, a new grain storage and barge loading facility has been constructed. See

referenced photograph for location of the facility and other changes in the area. The boulder jetties protecting Boyer Marina have been constructed. The positions of Boyer Lower Range and Boyer Upper Range were determined by ground survey methods from existing Corps of Engineers horizontal control. The positions should be considered of third order accuracy or less. The airstrip is in operation, but unattended. Its use is mainly for the use of Corps of Engineers and construction personnel. At present the airstrip is scheduled to remain in operation after the completion of Lower Granite Dam and become part of an recreational complex in the area of Boyer Marina. Construction has resumed on the Lower Granite Dam and frequent shoreline and cultural changes will be evident in its vicinity.

Respectfully submitted,

Robt. B. Melby

Robert B. Melby
Chief, Field Party, PMC

Review Report TP-00030
Chart Topography
April 1971

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 U.S.G.S. Quadrangle, Hay, Washington, 1952 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 Hydrographic 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

Jack E. Guth
Chief, Photogrammetry Division

FORM C&GS-164
(5-58)
COMM-DC
18-P68

SNAKE RIVER - LITTLE GOOSE POOL
WASHINGTO

DESCRIPTIVE REPORT CONTROL RECORD

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

South Zone

MAP T- _____ PROJECT NO. PH-7001 SCALE OF MAP 1:10,000 SCALE FACTOR _____

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)
	PC's	NA	2,741,343.50	
BRYAN, 1946	Pg 224	1927	516,107.52	
	PC's	NA	2,710,722.92	
PING, 1946	Pg 224	1927	503,788.50	
		NA	2,783,651.30	
TRAMWAY, 1945	Pg 225	1927	500,160.17	
		NA	2,760,290.49	
ALMOTA, 1945	Pg 225	1927	514,006.72	
		NA	2,760,350.10	
Sub. Pt. ALMOTA, 1945	Comp	1927	513,948.68	
		NA	2,697,743.28	
RILEY, 1945	Pg 226	1927	504,851.72	
		NA	2,628,288.07	
SCHMIDT, 1946	Pg 226	1927	476,617.77	
		NA	2,628,223.28	
Sub. Pt. SCHMIDT, 1946	Comp	1927	476,538.99	
		NA	2,697,371.96	
PENNAWAWA, 1946	Pg 226	1927	513,745.31	
		NA	2,654,958.47	
RIDPATH, 1946	Pg 226	1927	475,475.41	
		NA	2,671,405.97	
COX, 1946	Pg 226	1927	488,348.82	
		NA	2,618,340.11	
CANYON, 1946	Pg 227	1927	482,014.05	

COMPUTED BY I.I.S. DATE 2/20/70 CHECKED BY DATE 2/24/70

Form 567
(10-15-5

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

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

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 Lyle L. Riggers

R. B. Melby
Chief of Party.

STATE Washington

CHARTING NAME	DESCRIPTION	LL NO. FISCAL NAME	POSITION LATITUDE* ° ′	LATITUDE* ″ D.M. METERS	LONGITUDE* ° ′	LONGITUDE* ″ D.P. METERS	DATUM	METHOD OF LOCATION AND SURVEY NO.	DATE OF LOCATION	HARBOR CHART	SEACOAST CHART	OFFSHORE CHART	CHARTS AFFECTED
	Little Goose Reservoir Light 2	1969 13	46 35.2	10.2 314.0	118 004	21.8 464.0	N.A. 1927	TP-00027 PHOTO	8-18-70				684 SC
	Little Goose Reservoir Light 3	1969 15	46 35.4	25.0 771.0	117 594	25.1 535.0	N.A. 1927	TP00028 PHOTO	8-18-70				684 SC
	Little Goose Reservoir Light 4	1969 17	46 35.3	11.0 341.0	117 560	0.5 10.0	N.A. 1927	TP-00028 PHOTO	8-18-70				684 SC
	Little Goose Reservoir Light 5	1969 19	46 35.4	20.8 643.0	117 549	47.2 1004.0	N.A. 1927	TP-00029 PHOTO	8-18-70				684 SC
	Little Goose Reservoir Light 6	1969 21	46 35.2	13.2 409.0	117 529	56.4 1200.0	N.A. 1927	TP-00029 PHOTO	8-18-70				684 SC
	Little Goose Reservoir Light 7	1969 22	46 35.6	34.2 1055.0	117 533	19.8 422.0	N.A. 1927	TP-00029 PHOTO	8-18-70				684 SC
	Little Goose Reservoir Light 8	1969 23	46 36.5	25.8 796.0	117 525	28.1 598.0	N.A. 1927	TP-00029 PHOTO	8-18-70				684 SC
	Little Goose Reservoir Light 9	1969 25	46 37.3	17.8 549.0	117 522	12.2 260.0	N.A. 1927	TP-00029 PHOTO	8-18-70				684 SC
	Little Goose Reservoir Light 10	1969 27	46 37.4	22.8 705.0	117 510	56.2 1196.0	N.A. 1927	TP-00029 PHOTO	8-18-70				684 SC
	Little Goose Reservoir Light 11	1969 29	46 37.7	42.5 1312.0	117 510	59.4 1263.0	N.A. 1927	TP-00029 PHOTO	8-18-70				684 SC
	Little Goose Reservoir Light 14	1969 31	46 37.3	18.1 559.0	117 490	59.7 1271.0	N.A. 1927	TP-00031 PHOTO	8-18-70				684 SC
	Little Goose Reservoir Light 17	1969 33	46 39.0	0.7 22.0	117 462	15.8 336.0	N.A. 1927	TP-00031 PHOTO	8-18-70				684 SC
	Little Goose Reservoir Light 18	1969 35	46 38.9	57.0 1761.0	117 460	57.6 1225.0	N.A. 1927	TP-00031 PHOTO	8-18-70				684 SC
	Little Goose Reservoir Light 20	1969 37	46 40.4	21.7 669.0	117 455	29.7 632.0	N.A. 1927	TP-00030 PHOTO	8-14-70				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

USCOMM-DC 27125