

Original

T-12476 thru
T-12484

T-12476 thru
T-12484

T-12476 thru
T-12484

| | |
|---|--|
| Form 504 | |
| U. S. DEPARTMENT OF COMMERCE COAST AND GEODETIC SURVEY | |
| DESCRIPTIVE REPORT | |
| Harbor Line - Shoreline | |
| Type of Survey (Special Purpose Manuscripts) T-12476 thru | |
| Field No. | Office No. T-12484 (including T-12477A) |
| LOCALITY | |
| State | Oregon |
| General locality | Columbia - Willamette Rivers |
| Locality | Portland and Vancouver |
| Sept. 1963 - Feb. 1966 1966 | |
| CHIEF OF PARTY | |
| J.E. Waugh Div. of Photogrammetry, Wash, D.C. | |
| LIBRARY & ARCHIVES | |
| DATE | |

DESCRIPTIVE REPORT - DATA RECORD

T-12476 thru T-12484 (including T-12477A)

| | | | |
|--|--------|--|-----------------------|
| PROJECT NO. (II): | | | |
| 20,000-857 | | | |
| FIELD OFFICE (II): | | CHIEF OF PARTY | |
| Portland, Oregon | | P. A. Stark | |
| PHOTOGRAMMETRIC OFFICE (III): | | OFFICER-IN-CHARGE | |
| Washington, D.C. Portland, Oregon | | J. E. Waugh | |
| INSTRUCTIONS DATED (II) (III): Field: Feb. 28, 1963 Office: July 14, 1964 Office Amendment: Nov. 5, 1964 | | | |
| METHOD OF COMPILATION (III): B-8 Stereoplotter | | | |
| MANUSCRIPT SCALE (III): | | STEREOSCOPIC PLOTTING INSTRUMENT SCALE (III): | |
| 1:5000 | | | |
| DATE RECEIVED IN WASHINGTON OFFICE (IV): | | DATE REPORTED TO NAUTICAL CHART BRANCH (IV): | |
| | | | |
| APPLIED TO CHART NO. | | DATE: | DATE REGISTERED (IV): |
| | | | |
| GEOGRAPHIC DATUM (III): | | VERTICAL DATUM (III): | |
| N.A. 1927 | | See Item 35 of the Compilation Report | |
| REFERENCE STATION (III): | | | |
| | | | |
| LAT.: | LONG.: | <input type="checkbox"/> ADJUSTED <input type="checkbox"/> UNADJUSTED | |
| PLANE COORDINATES (IV): | | STATE | ZONE |
| = X = | | | |
| ROMAN NUMERALS INDICATE WHETHER THE ITEM IS TO BE ENTERED BY (II) FIELD PARTY, (III) PHOTOGRAMMETRIC OFFICE, OR (IV) WASHINGTON OFFICE. WHEN ENTERING NAMES OF PERSONNEL ON THIS RECORD GIVE THE SURNAME AND INITIALS, NOT INITIALS ONLY. | | | |

DESCRIPTIVE REPORT - DATA RECORD

| | | |
|---|--------------------|----------------------------------|
| FIELD INSPECTION BY (ii): None | | DATE: |
| MEAN HIGH WATER LOCATION (iii) (STATE DATE AND METHOD OF LOCATION): See Item 35 of the Compilation Report | | |
| PROJECTION AND GRIDS RULED BY (iv): A.E. Roundtree | | DATE 11-9-64 |
| PROJECTION AND GRIDS CHECKED BY (iv): I.Y. Fitzgearld | | DATE 11-9-64 |
| CONTROL PLOTTED BY (iii): R.A. Youngblood | | DATE 11-19-64 |
| CONTROL CHECKED BY (iii): J.P. Battley, Jr. | | DATE 11-19-64 |
| RADIAL PLOT OR STEREOSCOPIC CONTROL EXTENSION BY (iii): John T. Gerlach | | DATE Oct. 14, 1964 |
| STEREOSCOPIC INSTRUMENT COMPILATION (iii): R.A. Youngblood | PLANIMETRY | DATE Oct. 1964 * Dec. 1965 |
| | NONDURR | DATE |
| MANUSCRIPT DELINEATED BY (iii): R.A. Youngblood | | DATE Oct. 1964 * May 1966 |
| SCRIBING BY (iii): Portland Photogrammetric Office | | DATE |
| PHOTOGRAMMETRIC OFFICE REVIEW BY (iii): J. Battley ** | | DATE Oct. 1964 * Dec. 1965 |
| REMARKS: * Work on this project was interrupted several times for higher priority jobs and the closing of the Portland Photogrammetric Office. The dates listed above do not, therefore, reflect continuous work. ** See review remarks inserted in this report | | |

DESCRIPTIVE REPORT - DATA RECORD

CAMERA (KIND OR SOURCE) (III):

RC 5A Wild

PHOTOGRAPHS (III)

| NUMBER | DATE | TIME | SCALE | STAGE OF TIDE |
|---------------------|-------------|-------------|----------|---|
| 63 W 9549 thru 9558 | 2 Sept 1963 | 1512 - 1515 | 1:15,000 | * see Item 35 of the Compilation Report (about 1.4' above the Columbia River Datum) |
| 9559 thru 9579 | " | 1524 - 1530 | " | |
| 9580 thru 9594 | " | 1533 - 1540 | " | |
| 9595 thru 9610 | " | 1543 - 1548 | " | |
| 9611 thru 9618 | " | 1554 - 1556 | " | |

TIDE (III)

| | RATIO OF RANGES | MEAN RANGE | SPRING RANGE |
|---|-----------------|-------------|--------------|
| REFERENCE STATION: | | | |
| COORDINATE STATION: | | | |
| SUBORDINATE STATION: | | | |
| WASHINGTON OFFICE REVIEW BY (IV): | DATE: | | |
| PROOF EDIT BY (IV): | DATE: | | |
| NUMBER OF TRIANGULATION STATIONS SEARCHED FOR (II): | RECOVERED: | IDENTIFIED: | |
| NUMBER OF BM(S) SEARCHED FOR (II): | RECOVERED: | IDENTIFIED: | |
| NUMBER OF RECOVERABLE PHOTO STATIONS ESTABLISHED (III): | | | |
| NUMBER OF TEMPORARY PHOTO HYDRO STATIONS ESTABLISHED (III): | | | |

REMARKS:

SUMMARY TO ACCOMPANY DESCRIPTIVE REPORT
T-12476 THROUGH T-12484
JUNE 1966

This project consisted of ten special purpose manuscripts compiled on a reimbursable basis for the Corps of Engineers, Portland District. In addition to shoreline mapping, and inshore planimetry to prescribed limits, the project included a detailed harbor line survey which established and determined positions of harbor line reference monuments. Each manuscript, where applicable, showed the previously determined harbor lines. These lines were transferred from existing U.S. Engineers Drawings.

The manuscripts were compiled at a scale of 1:5000 using 1:15,000 scale color photography. This afforded an excellent interpretation of the many diversified planimetric features bordering the Columbia and Willamette Rivers, including fore-shore piling and dolphins. Project work did not include the investigation, for Bureau charting purposes, of aids to navigation, landmarks for charts or submerged cable areas.

Horizontal bridging was performed on the Stereoplanigraph C-8. Four flight strips were bridged and adjusted on the IBM-1620.

Field operations encompassed the recovery, establishment and premarking of horizontal control for photogrammetric mapping and the establishment of harbor line reference monuments for the Corps of Engineers.

Field edit was accomplished for each manuscript in liaison with the Portland District, U.S. Engineers.

The ten manuscripts were compiled in the Washington Office. Seven of these, (T-12476 thru T-12481) were edited, scribed and delivered to the Corps of Engineers by the Portland Photogrammetric Office. T-12482 thru T-12484 were completed in the Washington Office due to the closing of the Portland Office.

The ten manuscripts were reviewed for completeness and compliance with project instructions as each sheet was being delineated. After compilation the sheets were, as mentioned above, sent to the Portland Office for completion and delivery to the U.S. Engineers. ~~For this reason a formal Review Report will not be included in this Summary Report.~~

Two cronaflex copies and three ozalids of each sheet were supplied to the Portland Division of the Corps of Engineers.

Final delivery was completed in June 1966.

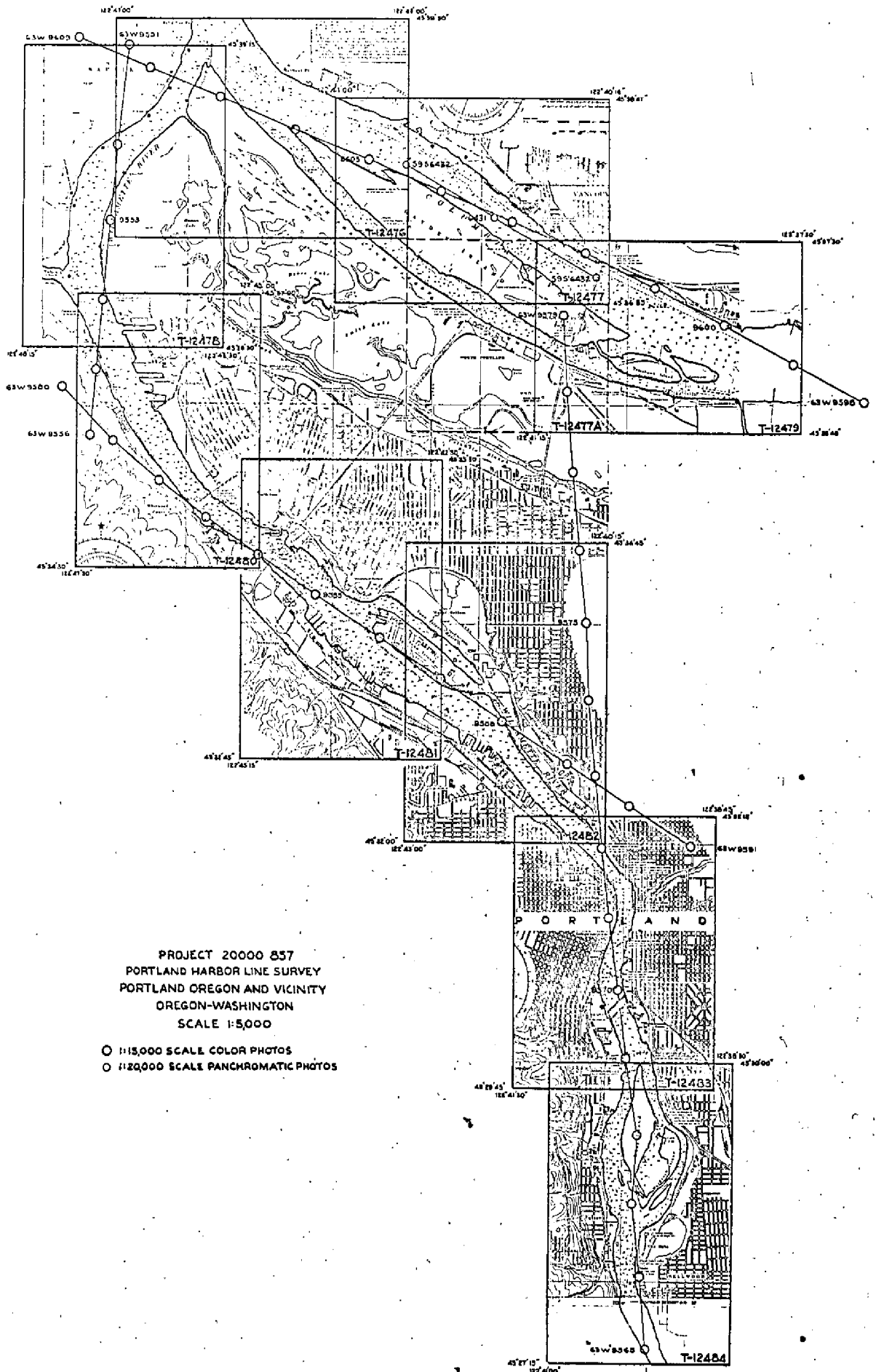
A copy of these surveys will be registered in the Bureau Archives under their respective T-numbers.

Submitted by:

Jeter P. Battley, Jr.

J. P. Battley, Jr.

Cartographer



PROJECT 20000 857
 PORTLAND HARBOR LINE SURVEY
 PORTLAND OREGON AND VICINITY
 OREGON-WASHINGTON
 SCALE 1:5,000

- 1:15,000 SCALE COLOR PHOTOS
- 1:20,000 SCALE PANCHROMATIC PHOTOS

Portland Harbor Line Survey

Oregon - Washington

Project 20,000-857

Photogrammetric Plot Report

October 14, 1964

Area Covered

This report covers the survey of portions of the shoreline of the Columbia and Willamette Rivers in the vicinity of Portland, Oregon and Vancouver, Washington. (T-12476 through T-12484)

Method

Horizontal bridging was performed on the Stereoplanigraph C-8. Four flight strips were bridged. All subsequent adjustments were performed by the IBM-1620.

Strip #1 consisted of 11 models, 63-W-9597 through 63-W-9608. Horizontal adjustment utilized 6 control points with 14 control points as checks.

Strip #2 consisted of 7 models, 63-W-9549 through 63-W-9556. Horizontal adjustment utilized 5 control points, with 6 control points and 3 tie points to strip #1 as checks.

Strip #3 consisted of 11 models, 63-W-9580 through 63-W-9591. Horizontal adjustment utilized 5 control points, with 24 control points and 8 tie points to strip #2 as checks.

Strip #4 consisted of 9 models, 63-W-9564 through 63-W-9573. Horizontal adjustment utilized 5 control points, with 12 control points and 11 tie points to strip #3 as checks.

The bridging procedure included locating outstanding prominent objects for use as landmarks.

ADEQUACY OF CONTROL

The horizontal control provided complied with the project instructions and was adequate. All control meets the accuracy requirements of the National Standards of Map Accuracy for 1:5,000 scale maps with the following exceptions:-

- (a) On strip #4, Station HLM-32, sub station A was missed by 5 feet due to a poor image point and was dropped.


(b) On strip #3, Station HLM-38, sub station A was missed by 40 feet. However, the control station identification card lists this point as doubtful in accuracy of identification and therefore it was dropped.

All closures of tie points between strips were averaged.


Photography

Color photos at 1:15,000 scale were used. The photography was adequate as to coverage, overlap and definition.

Submitted by:

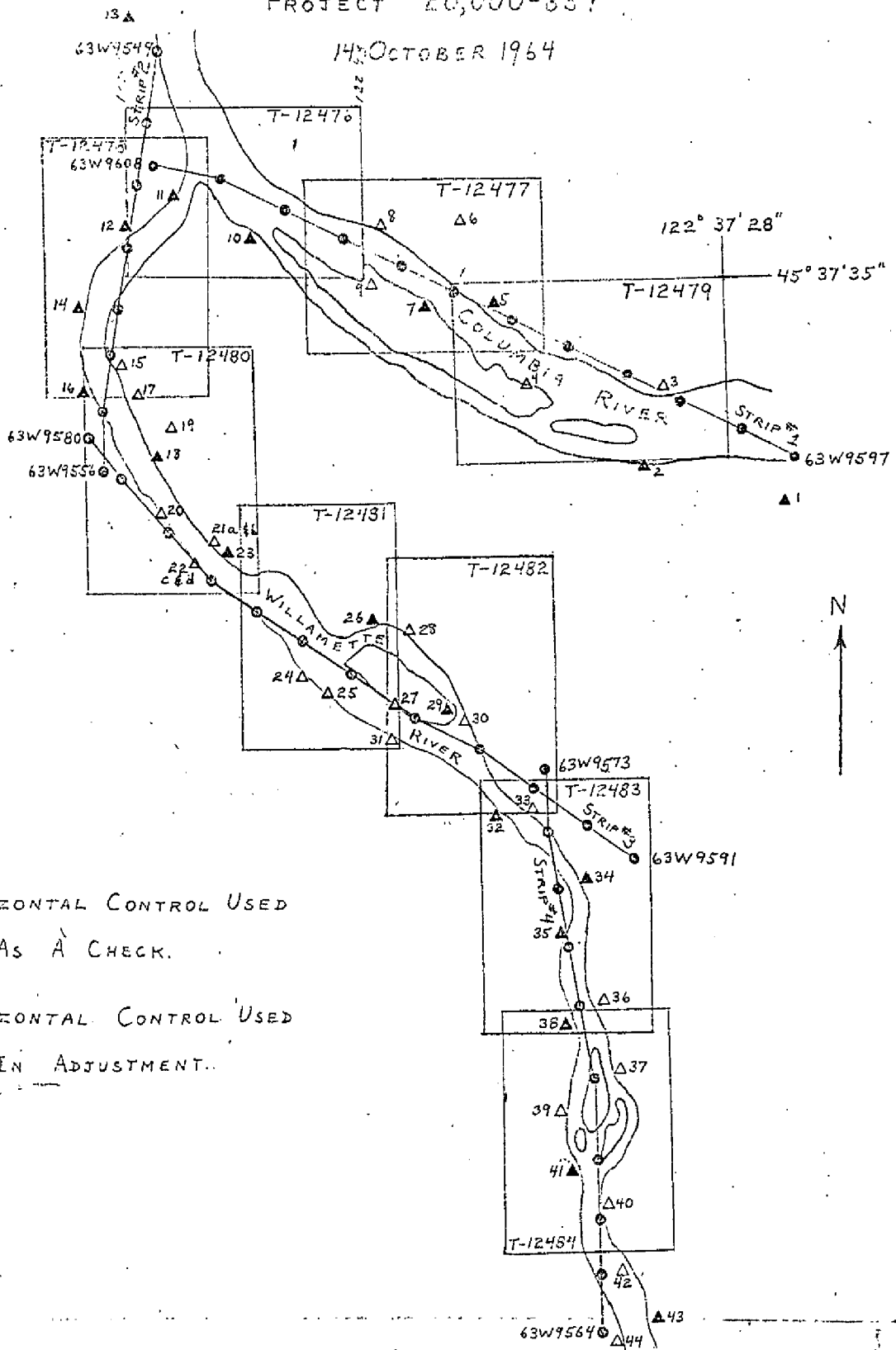

John T. Gerlach

Approved by:


John D. Perrow, Jr.

Aerotriangulation Sketch
 PORTLAND HARBOR LINE SURVEY
 PROJECT 20,000-357

14 OCTOBER 1964



Δ HORIZONTAL CONTROL USED
 AS A CHECK.

▲ HORIZONTAL CONTROL USED
 IN ADJUSTMENT.

INDEX OF HORIZONTAL CONTROL

| | | | |
|----|---|----|--|
| 1 | COPY, 1962 | 23 | HLM 52 |
| 2 | HLM V-10 | 24 | HLM 47 |
| 3 | HLM V-9 | 25 | HLM 42 |
| 4 | HLM V-7 | 26 | HLM 44 |
| 5 | HLM V-6 | 27 | HLM 39 |
| 6 | HLM V-5 | 28 | HLM 41A |
| 7 | HLM V-4 | 29 | HLM 37 |
| 8 | HLM V-1 | 30 | HLM 36 |
| 9 | PER, 1938 | 31 | HLM 38 |
| 10 | NETTLE, 1938 | 32 | HLM 33 |
| 11 | HLM 70 | 33 | HLM 32 |
| 12 | HLM 68 | 34 | STEEL, 1938 |
| 13 | MORGAN LANDING, 1937 | 35 | BURN, 1938 |
| 14 | HLM 65 | 36 | HLM 21 |
| 15 | RAM, 1962 | 37 | HLM 19 |
| 16 | HLM 60 | 38 | HLM 14 |
| 17 | HLM 61 | 39 | HLM 9 (OFFSET) |
| 18 | HLM 57 | 40 | HLM 4 |
| 19 | PORTLAND, ST. JOHNS TERR. #4, BLACK ELEVATED TANK, 1938 | 41 | FULTON, 1938 |
| 20 | HLM 55 | 42 | HLM 1 |
| 21 | ST. JOHNS BRIDGE, a) NE SPIRE b) SE SPIRE | 43 | MILWAUKIE, WAVERLY COUNTRY CLUB FLAGPOLE |
| 22 | ST. JOHNS BRIDGE, c) NW SPIRE d) SW SPIRE | 44 | CUB, 1962 |

COMPILATION REPORT
PROJECT 20,000-857
PORTLAND HARBOR LINE SURVEY AND MAPS
JUNE 1966

31. Delineation

Ten shoreline maps, (T-12476 thru T-12484), at a scale of 1:5000 were compiled to furnish a base for the Corps of Engineers for the revision of harbor lines.

The entire project was compiled on the B-8 stereoplotter using September 1963 color glass plates (1:15,000 scale). This photography provided an excellent interpretation of all features to be mapped.

The interior limits of compilation were marked with a grease pencil by Mr. B.G. Jones on a set of color prints. These were compiled to include the first street parallel to the shoreline or its equivalent depending upon circumstances. Roads and streets were compiled in double lines to scale - curb to curb except for double dashed roads; large buildings along the waterfront, railroads, piers and all offshore structures were accurately located and delineated to scale.

By the method described in Item 33 of this report and Items 20-21 of the project instructions, the old harbor lines were located on all manuscripts where harbor lines were previously determined. This method could not be used on T-12484 due to extensive changes in planimetry from our compilation and the Engineers drawings. The Portland District of the Corps of Engineers concurred in this and requested we compile this sheet without the old harbor lines.

The first seven manuscripts (T-12476 thru T-12481 including T-12477A) were sent to the Portland Office for completion which included the location of the revised harbor lines, their azimuths and distances and scribing. Due to the closing of the Portland Office, the last three surveys (T-12482 thru T-12484) were completed in the Washington Office.

32. Control

Bridging furnished by Aerotriangulation was sufficient to adequately compile the manuscripts to the rigid requirements set forth in the Project Instructions.

33. Supplemental Data

Corps of Engineers drawings showing the old harbor lines. The scale of these drawings was about 1 inch equals 800 feet. A cronaflex reduction, to the scale of these drawings, was made of each manuscript, and the old harbor line was transferred to the reductions and scaled to the 1:5000 manuscripts.

34. Contours and Drainage

Not applicable

35. Shoreline and Alongshore Details

The vertical datum for the mapped shoreline was five feet above Columbia River datum. The Columbia River datum was 1.73 feet above MSL at Vancouver, and 1.82 feet above MSL at the U.S. Government Moorage. The shoreline datum was requested by the Corps of Engineers.

The shoreline was compiled from color photographs taken September 2, 1963 (mean time of 15h 40m, Pacific Standard Time) at a river stage of approximately 2 feet above the Columbia River Datum. U.S. Engineers gauges were read at the time of photography to establish the river stage. Gauges were located at Vancouver and the U.S. Government Moorages.

The shoreline was compiled 3 feet above the water level at time of photography. Dolphins, piling, etc. were shown in detail and bars and flats beyond the shoreline were shown as low water areas.

36. Offshore Details

See Items 31 and 35

37. Landmarks and Aids

(See the summary included with this report). Objects of landmark value to the Engineers were shown on these surveys, but no formal investigation, for charting purposes, of landmarks and aids were made for this project.

38. Control for Future Surveys

Inapplicable

39. Junctions

Each adjoining sheet overlapped by varying amounts, resulting in accurate junctions between the surveys.

40. Horizontal and Vertical Accuracy

All manuscripts within the project comply with the National Standards of Accuracy.

41. - 45.

Inapplicable

46. Comparison with Existing Maps

Inapplicable. These were special purpose manuscripts and interior details were, for the most part, confined to the first main road inshore from the rivers.

47. Comparison with Nautical Charts

A comparison was made with 1:40,000 scale charts 6153, 3rd edition August 1965; 6154, 3rd edition August 1965; 6155, (1:5,000) 1:20,000 scale, 27 edition July 1965 and 6166, 1:50,000 scale 4th edition July 1965. Many cultural features such as shoreline buildings, a few piers and dolphins could be added to the existing charts from these surveys.

Items to be applied to Nautical Charts immediately - None.

Submitted by:
R. A. Youngblood
R. A. Youngblood
Cartographic Technician

Approved by:
K. N. Maki
K. N. Maki
Chief, Compilation Section

REVIEW REPORT
T-12476 THRU T-12484 (INCLUDING T-12477A)
SPECIAL PURPOSE MANUSCRIPTS
(SHORELINE)
JUNE 1966

61. General Statement

The ten manuscripts of this project were reviewed for completeness and compliance with project instructions as they were being compiled in the Washington Office.

The completed manuscripts were sent to the Portland Photogrammetric Office along with cronaflex copies and a Field Edit ozalid. Field edit was accomplished by the Portland Office working in liaison with the Corps of Engineers, Portland District. The surveys were then scribed, printed and supplied to the Corps of Engineers by the Portland Photogrammetric Office. Three manuscripts, T-12482 thru T-12484, were returned and completed in the Washington Office due to the closing of the Portland Office.

A cronaflex copy and the negative of the completed survey were returned to the Washington Office by the Portland Office as each sheet was completed. These final prints were reviewed by the Portland Photogrammetric Office, prior to delivery to the Corps of Engineers, but were rechecked in the Washington Office with the original compilation. The manuscript, as originally compiled, shows many boathouses throughout the project. These were not compiled on the final survey at the request of the Corps of Engineers. The piers were shown and the areas labeled as "Moorage area, floating piers, boathouses and house boats".

62. Comparison with Registered Topographic Surveys

These were special purpose manuscripts compiled at a scale of 1:5000 and interior details were compiled to the first road inshore. A comparison was made with only the nautical charts in the area.

63. Comparison with Maps of Other Agencies

(See item 62 above)

64. Comparison with Contemporary Hydrographic Surveys

Inapplicable (see item 62 above)

65. Comparison with Nautical Charts

A comparison was made with 1:40,000 scale charts 6153, 3rd edition August 1965; 6154 3rd edition August 1965; chart 6155, 1:20,000 scale, 27th edition July 1965 and chart 6166, 1:5000 scale 4th edition July 1965. Many new cultural features such as shoreline factory buildings and a few piers could be added to the existing charts from these surveys. Due to the excellent 1:15,000 scale color photography and the compilation scale of these manuscripts (1:5000), a comprehensive delineation was achieved of the numerous foreshore dolphins and piling existing in the Columbia and Willamette Rivers. These surveys provide an excellent base to revise the existing charts for these features.


66. Adequacy of Results and Future Surveys

The ten surveys of this project comply with project instructions. Excellent positioning of compiled features was achieved throughout the process of compiling these maps, adhering to the rigid accuracy requirements specified. (See Office Instructions; Item 4, dated July 14, 1964 filed with the Completion Report).


All surveys in the project comply with the National Standards of Accuracy.

Approved by:


Chief, Photogrammetric Branch


Chief, Photogrammetry Division

Reviewed by:


Cartographer

Chief, Marine Chart Division

DESCRIPTIVE REPORT CONTROL RECORD

MAP T-
PROJECT NO. PORTLAND, Oregon

SCALE OF MAP

SCALE FACTOR

| STATION | SOURCE OF INFORMATION (INDEX) | DATUM | LATITUDE OR LONGITUDE OR X COORDINATE | Y COORDINATE | DISTANCE FROM GRID OR PROJECTION LINE IN METERS (1 Ft. = 3048006 meter) | N.A. 1927 - DATUM FORWARD (BACK) |
|-------------------------------|---|-------|---------------------------------------|-------------------|---|----------------------------------|
| Milwaukie | | | 1447 | 870.99 ✓ | | 88-2624 ✓ |
| Waverly Country Club Flagpole | | | 1657 | 371.96 ✓ | | 40-0735 ✓ |
| CUB, 1962 | IBM Final Adjustment #901 ✓ | | 1446, | 718.48 ✓ | | 88-1921 ✓ |
| Hub "A" | | | 657, | 251.38 ✓ | | 40-0661 ✓ |
| | | | 1448 | 240.81 ✓ | | |
| | | | 656 | 450.85 ✓ | | |
| SS | | | 1448 | 331.95 ✓ | | |
| | | | 656 | 487.69 ✓ | | |
| COPY 1902 | IBM #930 ✓ | 1927 | 1463 | 846.01 ✓ | | 89-2393 ✓ |
| | | | 710, | 907.03 ✓ | | 43-3370 ✓ |
| SS "A" | | | 1461 | 696.43 ✓ | | |
| | | | 711, | 949.15 ✓ | | |
| SS "B" | | | 1461 | 674.09 ✓ | | |
| | | | 711, | 217.97 ✓ | | |
| Waverly | | | 1448 | 331.95 | | 89-2393 |
| PEP, 1938 | GP-2-393 IBM #923 PC-1-4 D-397-2-30 | 1927 | 1434 | 956.40 ✓ | | 87-4751 ✓ |
| | | | 723, | 601.06 ✓ | | 44-1108 ✓ |
| SSA | comp. | | 1435 | 024.42 ✓ | | |
| | | | 723, | 592.81 ✓ | | |
| SSB | comp. | | 1434 | 897.86 ✓ | | |
| | | | 723, | 711.50 ✓ | | |
| HLM-41A | IBM #69 ✓ | | 1434 | 656.43 ✓ | | 87-4568 ✓ |
| | | | 699, | 676.85 ✓ | | 42-6524 ✓ |

COMPUTED BY R.G.

DATE

CHECKED BY J.P.P.

DATE

DESCRIPTIVE REPORT CONTROL RECORD

2007

PROJECT NO. *019947*

SCALE OF MAP

SCALE FACTOR

MAP T.

| STATION | SOURCE OF INFORMATION (INDEX) | DATUM | LATITUDE OR LONGITUDE OR X COORDINATE OR Y COORDINATE | N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS (1 Ft. = 3048006 meter) FORWARD (BACK) |
|---------------------|--|-------------|---|--|
| <i>111111</i> | <i>IBM #18 ✓</i> | | <i>1,444,326.97 ✓</i> | <i>88-0463 ✓</i> |
| <i>887</i> | | | <i>675, 101.49 ✓</i> | <i>41-1543 ✓</i> |
| <i>885</i> | | | <i>1,444,337.43 ✓</i> | |
| | | | <i>675, 120.96 ✓</i> | |
| | | | <i>1,444,350.06 ✓</i> | |
| | | | <i>675, 080.66 ✓</i> | |
| <i>111111-21</i> | <i>IBM #32 ✓</i> | | <i>1,445,423.69 ✓</i> | <i>88-1132 ✓</i> |
| | | | <i>678, 390.17 ✓</i> | <i>41-3547 ✓</i> |
| <i>881</i> | | | <i>1,445,447.66 ✓</i> | |
| | | | <i>678, 385.11 ✓</i> | |
| <i>883</i> | | | <i>1,445,423.66 ✓</i> | |
| | | | <i>678, 248.37 ✓</i> | |
| <i>111111, 1938</i> | <i>SP-2-225 PC-1-16 D-4.80-9-18-20</i> | <i>1927</i> | <i>1,444,358.46 ✓</i> | <i>88-0483 ✓</i> |
| | | | <i>684, 026.71 ✓</i> | <i>41-6984 ✓</i> |
| <i>95A</i> | | | <i>1,444,281.94 ✓</i> | |
| | | | <i>683, 970.91 ✓</i> | |
| <i>95B</i> | | | <i>1,444,349.46 ✓</i> | |
| | | | <i>684, 047.95 ✓</i> | |
| <i>111111-33</i> | <i>IBM #51 ✓</i> | | <i>1,441,680.33 ✓</i> | <i>87-8850 ✓</i> |
| | | | <i>689, 959.95 ✓</i> | <i>42-0600 ✓</i> |
| | | | <i>1,441,706.74 ✓</i> | |
| | | | <i>689, 970.93 ✓</i> | |
| | | | <i>1,441,692.04 ✓</i> | |
| | | | <i>689, 959.78 ✓</i> | |

COMPUTED BY *JG*

DATE

CHECKED BY *[Signature]*

DATE

DESCRIPTIVE REPORT CONTROL RECORD

MAP T- PROJECT NO. SCALE OF MAP SCALE FACTOR

| STATION | SOURCE OF INFORMATION (INDEX) | DATUM | LATITUDE OR LONGITUDE OR X COORDINATE OR Y COORDINATE | N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS (1 in. = 3048006 meters) FORWARD (BACK) |
|-------------|-------------------------------|-------|---|---|
| 112 M-36 | IEM # 57 | | 1,438,034.96 ✓ 695,051.12 ✓ | 87-6628 ✓ 42-3704 ✓ |
| 305 A | | | 1,438,018.46 ✓ 695,064.58 ✓ | |
| 305 B | | | 1,437,989.54 ✓ 695,007.61 ✓ | |
| 112 M-38 | IEM # 59 | | 1,435,188.49 ✓ 694,554.15 ✓ | 87-4893 ✓ 42-3401 ✓ |
| 305 C | | | 1,435,256.11 ✓ 694,573.23 ✓ | |
| 305 D | | | 1,434,969.73 ✓ 694,721.12 ✓ | |
| 112 M-39 | IEM # 61 | | 1,433,878.62 ✓ 697,465.70 ✓ | 87-4094 ✓ 42-5176 ✓ |
| 305 E | | | 1,434,207.85 ✓ 697,232.68 ✓ | |
| 305 F | | | 1,434,014.08 ✓ 697,667.08 ✓ | |
| 112 M-40 | IEM # 75 | | 1,428,636.03 ✓ 698,963.43 ✓ | 87-0898 ✓ 42-6089 ✓ |
| 305 G | | | 1,428,578.56 ✓ 698,500.11 ✓ | |
| 305 H | | | 1,428,392.25 ✓ 698,223.36 ✓ | |
| COMPUTED BY | | | CHECKED BY | DATE |
| JG | | | JG | |

DESCRIPTIVE REPORT CONTROL RECORD

7-26-69

PROJECT NO: 10-11-13-14-15-16-17-18-19-20-21-22-23-24-25-26-27-28-29-30-31-32-33-34-35-36-37-38-39-40-41-42-43-44-45-46-47-48-49-50-51-52-53-54-55-56-57-58-59-60-61-62-63-64-65-66-67-68-69-70-71-72-73-74-75-76-77-78-79-80-81-82-83-84-85-86-87-88-89-90-91-92-93-94-95-96-97-98-99-100

MAP T- _____ SCALE OF MAP _____ SCALE FACTOR _____

| STATION | SOURCE OF INFORMATION (INDEX) | DATUM | LATITUDE OR LONGITUDE OR COORDINATE | | N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS (1 ft. = 3048006 meter) FORWARD | (BACK) |
|----------|-------------------------------|-------|-------------------------------------|---|--|--------|
| | | | ✓ | ✓ | | |
| 11110-47 | IBM #78 ✓ | | 1,426,809.73 ✓ | | 86-9785 ✓ | |
| | | | 701,254.84 ✓ | | 42-7791 ✓ | |
| | | | 1,426,819.37 ✓ | | | |
| | | | 701,737.77 ✓ | | | |
| | | | 1,426,789.60 ✓ | | | |
| | | | 701,732.59 ✓ | | | |
| | IBM #88 ✓ | | 1,421,728.08 ✓ | | 86-6687 ✓ | |
| | | | 707,567.99 ✓ | | 43-1334 ✓ | |
| | | | 1,421,686.53 ✓ | | | |
| | | | 707,467.11 ✓ | | | |
| | | | 1,421,613.57 ✓ | | | |
| | | | 707,411.64 ✓ | | | |
| 11110-55 | IBM #93 ✓ | | 1,418,057.39 ✓ | | 86-4449 ✓ | |
| | | | 709,692.13 ✓ | | 43-2629 ✓ | |
| | | | 1,418,032.61 ✓ | | | |
| | | | 709,691.14 ✓ | | | |
| | | | 1,417,987.96 ✓ | | | |
| | | | 709,763.96 ✓ | | | |
| 11110-57 | IBM #95 ✓ | | 1,417,963.62 ✓ | | 86-4392 ✓ | |
| | | | 713,026.90 ✓ | | 43-4662 ✓ | |
| | | | 1,417,921.02 ✓ | | | |
| | | | 713,126.75 ✓ | | | |
| | | | 1,417,972.45 ✓ | | | |
| | | | 713,969.98 ✓ | | | |

COMPUTED BY _____ DATE _____

CHECKED BY *WPA* DATE _____

DESCRIPTIVE REPORT CONTROL RECORD

MAP T. 120374 PROJECT NO. 070920 SCALE OF MAP _____ SCALE FACTOR _____

| STATION | SOURCE OF INFORMATION (INDEX) | DATUM | LATITUDE OR LONGITUDE OR COORDINATE | DISTANCE FROM GRID OR PROJECTION LINE IN METERS (1 Ft. = 3048006 meters) | |
|------------|-----------------------------------|-------|-------------------------------------|--|--------|
| | | | | FORWARD | (BACK) |
| 111.34-608 | IBM # 109 ✓ | | 1,416,641.07 ✓ | 86-3586 - ✓ | |
| | | | 728,358.88 ✓ | 44-4008 - ✓ | |
| | | | 1,416,601.38 ✓ | | |
| | | | 728,359.65 ✓ | | |
| | | | 1,416,395.19 ✓ | | |
| | | | 728,632.28 ✓ | | |
| | GP-2-412 PC-1-11 D-397-1-29 | 1927 | 1,425,259.44 ✓ | 86-8840 - ✓ | |
| | | | 727,376.40 ✓ | 44-3410 - ✓ | |
| | GP-2-371 PC-1-3 D-396-1-15 | " | 1,418,160.70 ✓ | 86-4515 ✓ | |
| | | | 741,197.46 ✓ | 45-1835 ✓ | |
| | comp | " | 1,418,112.15 ✓ | | |
| | | | 741,257.75 ✓ | | |
| | comp | " | 1,418,096.00 ✓ | | |
| | | | 741,122.97 ✓ | | |
| | PG-3 GP-2-391-2012 | " | 1,420,824.16 ✓ | 86-6136 ✓ | |
| | | | 742,568.14 ✓ | 45-2670 ✓ | |
| | IBM # 119 ✓ | | 1,442,294.28 ✓ | 87-9224 ✓ | |
| | | | 721,250.00 ✓ | 43-9675 ✓ | |
| | | | 1,442,639.73 ✓ | | |
| | | | 721,121.70 ✓ | | |
| | | | 1,442,310.54 ✓ | | |
| | | | 721,205.58 ✓ | | |
| | IBM # 105 ✓ | | 1,413,351.24 ✓ | 86-1575 ✓ | |
| | | | 724,996.91 ✓ | 44-1654 ✓ | |

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DESCRIPTIVE REPORT CONTROL RECORD

MAP T- PROJECT NO. SCALE OF MAP SCALE FACTOR

| STATION | SOURCE OF INFORMATION (INDEX) | DATUM | LATITUDE OR X COORDINATE LONGITUDE OR Y COORDINATE | DISTANCE FROM GRID OR COLLECTION LINE IN METERS (1 Ft. = 30.48 meters) | |
|---------|-------------------------------|-------|--|---|----------------------------|
| | | | | FORWARD | (BACK) |
| HMM-65 | IBM # 117 ✓ | | 1,439, 213.57 ✓ 723, 569.03 ✓ | 87-7346 ✓ 44-1089 ✓ | ✓ ✓ |
| | | | 1,439, 152.57 ✓ 722, 472.72 ✓ 1,439, 127.00 ✓ 722, 733.27 ✓ | | |
| | IBM # 125 ✓ | | 1,452, 144.40 ✓ 712, 436.79 ✓ 1,451, 922.21 ✓ 712, 317.37 ✓ 1,452, 112.00 ✓ 712, 443.07 ✓ | 88-5229 ✓ 43-4302 ✓ | ✓ ✓ ✓ ✓ ✓ ✓ |
| HMM-19 | IBM # 27 ✓ | | 1,446, 829.21 ✓ 673, 114.23 ✓ | 88-1989 ✓ 41-0331 ✓ | ✓ ✓ |
| | IBM # 121 ✓ | | 1,443, 079.68 ✓ 717, 727.89 ✓ | 87-9703 ✓ 43-7528 ✓ | ✓ ✓ |
| | IBM # 110 ✓ | | 1,418, 989.83 ✓ 730, 380.65 ✓ | 86-5018 ✓ 44-5241 ✓ | ✓ ✓ |
| | IBM # 116 ✓ | | 1,436, 648.13 ✓ 722, 381.85 ✓ | 87-5782 ✓ 44-0365 ✓ | ✓ ✓ |
| | IBM # 114 ✓ | | 1,435, 534.81 ✓ 726, 819.81 ✓ | 87-5104 ✓ 44-3070 ✓ | ✓ ✓ |
| | IBM # 98 ✓ | | 1,414, 423.44 ✓ 716, 624.76 ✓ | 86-2234 ✓ 43-6855 ✓ | ✓ ✓ |

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DESCRIPTIVE REPORT, CONTROL RECORD

MAP T-PORTLAND, Oregon PROJECT NO. 7979 SCALE OF MAP _____ SCALE FACTOR _____

| STATION | SOURCE OF INFORMATION (INDEX) | DATUM | LATITUDE OR LONGITUDE OR COORDINATE | N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS, (1 FT. = 304.8006 meters) FORWARD | (BACK) |
|---------------------------|-------------------------------|------------|-------------------------------------|--|---------|
| RAM-902 | IBM # 918 ✓ | | 1,415,238.23 ✓ | 86-2731 ✓ | |
| HLM-61 | IBM # 99 ✓ | | 720,260.93 ✓ | 43-9072 ✓ | |
| PORTLAND ST. Johns | GP-2-427 | | 1,416,235.20 ✓ | 86-3339 ✓ | |
| PC-1-17 | Dec 930-2033 | 1927 | 717,549.52 ✓ | 43-7419 ✓ | |
| ST. Johns, bridge | PC-1-18 | " | 1,418,956.76 ✓ | 86-4998 ✓ | |
| N.W. SPIRE | PC-1-18 | " | 714,606.50 ✓ | 43-5625 ✓ | |
| " | PC-1-18 | " | 1,420,089.23 ✓ | 86-5688 ✓ | 86-5678 |
| S.W. SPIRE | PC-1-18 | " | 707,310.89 ✓ | 43-1178 ✓ | |
| " | PC-1-18 | " | 1,420,116.95 ✓ | 86-5705 ✓ | |
| N.E. SPIRE | PC-1-18 | " | 707,266.85 ✓ | 43-1151 ✓ | |
| SEE SPIRE | PC-1-18 | " | 1,421,106.76 ✓ | 86-6308 ✓ | |
| HLM-44 | IBM # 67 ✓ | | 707,961.22 ✓ | 43-1574 ✓ | |
| HLM-37 | IBM # 73 ✓ | | 1,421,135.06 ✓ | 86-6326 ✓ | |
| HLM-33 | IBM # 52 ✓ | | 707,917.47 ✓ | 43-1547 ✓ | |
| STEEL #1938 | IBM # 911 ✓ | | 1,431,239.80 ✓ | 87-2485 ✓ | |
| YANCOOVER, ALCOA CONCRETE | | | 702,092.85 ✓ | 42-7997 ✓ | |
| STREET 1963 | | | 1,436,307.91 ✓ | 87-5575 ✓ | |
| COMPUTED BY JG | | | 696,637.28 ✓ | 42-4671 ✓ | |
| | | | 1,440,522.45 ✓ | 87-8144 ✓ | |
| | | | 689,455.32 ✓ | 42-0293 ✓ | |
| | | | 1,445,024.88 ✓ | 88-0889 ✓ | |
| | | | 686,178.86 ✓ | 41-8295 ✓ | |
| | | | 1,429,377.32 ✓ | 87-1350 ✓ | |
| | | | 730,232.07 ✓ | 44-5150 ✓ | |
| COMPUTED BY | DATE | CHECKED BY | DATE | | |
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DESCRIPTIVE REPORT CONTROL RECORD

MAP T. _____ PROJECT NO. _____ SCALE OF MAP _____ SCALE FACTOR _____

| STATION | SOURCE OF INFORMATION (INDEX) | DATUM | LATITUDE OR LONGITUDE OR COORDINATE | N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS (1 Ft. = 304.8006 meters) FORWARD |
|---------|-------------------------------|-------|-------------------------------------|---|
| | IBM # 11 | | 1,443,006.64 | 87-9659 ✓ |
| | IBM # 904 | | 671,031.47 | 40-9062 ✓ |
| | IBM # 6 | | 1,444,054.15 | 88-0297 ✓ |
| | IBM # 1 | | 606,912.80 | 40-6551 ✓ |
| | PC's - M-P13 | | 1,445,163.14 | 88-0973 ✓ |
| | | | 663,532.37 | 40-4490 ✓ |
| | | | 1,446,508.70 | 88-1793 ✓ |
| | | | 659,958.08 | 40-2311 ✓ |
| | | | 1,437,499.95 | 87-6302 ✓ |
| | | | 716,725.01 | 43-6916 ✓ |
| | | | 1,444,998.99 | 88-0873 ✓ |
| | | | 682,887.80 | 41-6289 ✓ |
| | | | 1,415,402.41 | 86-2831 ✓ |
| | | | 719,216.02 | 43-8435 ✓ |
| | | | 1,440,390.26 | 87-8064 ✓ |
| | | | 674,845.19 | 41-1386 ✓ |
| | | | 1,443,579.76 | 88-0008 ✓ |
| | | | 678,611.31 | 41-3682 ✓ |
| | | | 1,412,996.45 | 86-1364 ✓ |
| | | | 722,198.46 | 44-0253 ✓ |
| | | | 1,452,227.58 | 88-5280 ✓ |
| | | | 712,268.72 | 43-4200 ✓ |
| | | | 1,419,160.78 | 86-5122 ✓ |
| | | | 708,307.96 | 43-1785 ✓ |

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| MAP T- | PROJECT NO. | SCALE OF MAP | SCALE FACTOR | DATUM | SOURCE OF INFORMATION (INDEX) | LATITUDE OR LONGITUDE OR X COORDINATE OR Y COORDINATE | N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS (1 Ft. = 3048006 meters) | (BACK) |
|------------------------------|-------------|--------------|--------------|-------|--------------------------------------|---|--|--------|
| HLM-40 | | | | | IGM # 80 ✓ | 1,425,497.71 ✓ | 86-8985 ✓ | |
| HLM-41 | | | | | IGM # 64 ✓ | 705,088.96 ✓ | 42-9823 ✓ | |
| UPSTREAM, 1962 | | | | | IGM # 914 ✓ | 1,431,293.57 ✓ | 87-2518 ✓ | |
| | | | | | | 699,664.46 ✓ | 42-6516 ✓ | |
| | | | | | | 1,434,756.58 ✓ | 87-4629 ✓ | |
| | | | | | | 696,973.79 ✓ | 42-4876 ✓ | |
| Horsan Landing FANBOIS, 1937 | | | | | GP-2-1109 PC-110 298-1115-1100 | 1,418,112.48 ✓ | 86-4483 ✓ | |
| Nettle, 1934 SS | | | | | | 741,257.38 ✓ | 45-1871 ✓ | |
| | | | | | | 1,425,194.11 ✓ | | |
| | | | | | | 721,318.79 ✓ | | |
| | | | | | | 1,443,164.11 ✓ | 87-9755 ✓ | |
| HLM 9 USE OFFSET | | | | | | 670,993.04 ✓ | 40-9038 ✓ | |
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7/12/62

RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. T-12480

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 |
|-------|---------|--------------|--|
| 6155 | 4/21/67 | Frank Pavlov | Full Part Before After Verification Review Inspection Signed Via Drawing No. |
| 18526 | 4/21/80 | Diane Larson | Full Part Before After Verification Review Inspection Signed Via Drawing No. 40 |
| | | | Full Part Before After Verification Review Inspection Signed Via Drawing No. |
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