

TP-01246

TP-01246

NOAA FORM 76-35
(6-80)U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEY

DESCRIPTIVE REPORT

THIS MAP EDITION WILL NOT BE FIELD EDITED

Map No.
TP-01246*Edition No.*
1*Job No.*
CM-8305*Map Classification*
CLASS III (FINAL)*Type of Survey*
SHORELINE

LOCALITY

State
CALIFORNIA*General Locality*

CARQUINEZ STRAIT AND SOUTHERN SUTSUN BAY

Locality
MARE ISLAND

1983 TO 19

REGISTERED IN ARCHIVES

DATE

| | | | |
|---|--|---|--|
| NOAA FORM 76-36A (3-72) | | U. S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMIN. | |
| DESCRIPTIVE REPORT - DATA RECORD | | TYPE OF SURVEY <input checked="" type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED | |
| PHOTOGRAMMETRIC OFFICE Coastal Mapping Unit, Atlantic Marine Center Norfolk, VA OFFICER-IN-CHARGE A. Y. Bryson, CDR | | SURVEY TP. <u>01246</u> MAP EDITION NO. <u>(1)</u> MAP CLASS <u>III(Final)</u> JOB <u>BMX CM-8305</u> | |
| I. INSTRUCTIONS DATED | | LAST PRECEDING MAP EDITION | |
| 1. OFFICE Aerotriangulation November 1, 1984 Compilation October 2, 1986 | | 2. FIELD Control March 9, 1983 Change No. 1 March 16, 1983 | |
| II. DATUMS | | | |
| 1. HORIZONTAL: <input checked="" type="checkbox"/> 1927 NORTH AMERICAN | | OTHER (Specify) | |
| 2. VERTICAL: <input checked="" type="checkbox"/> MEAN HIGH-WATER <input type="checkbox"/> MEAN LOW-WATER <input type="checkbox"/> MEAN LOWER LOW-WATER <input type="checkbox"/> MEAN SEA LEVEL | | OTHER (Specify) | |
| 3. MAP PROJECTION Lambert Conformal | | 4. GRID(S) STATE California ZONE 3 | |
| 5. SCALE 1:10,000 | | STATE ZONE | |
| III. HISTORY OF OFFICE OPERATIONS | | | |
| OPERATIONS | | NAME | DATE |
| 1. AEROTRIANGULATION METHOD: <u>Analytic</u> BY LANDMARKS AND AIDS BY | | V. McNeel | Nov 1984 |
| 2. CONTROL AND BRIDGE POINTS METHOD: <u>Calcomp 718</u> PLOTTED BY CHECKED BY | | V. McNeel D. Norman | Nov 1984 Nov 1984 |
| 3. STEREOSCOPIC INSTRUMENT COMPILATION INSTRUMENT: <u>Wild B-8</u> SCALE: <u>1:10,000</u> | | PLANIMETRY BY CHECKED BY CONTOURS BY CHECKED BY | R. Kravitz F. Mauldin Nov 1986 Nov 1986 |
| 4. MANUSCRIPT DELINEATION METHOD: <u>smooth drafted</u> SCALE: <u>1:10,000</u> | | PLANIMETRY BY CHECKED BY CONTOURS BY CHECKED BY HYDRO SUPPORT DATA BY CHECKED BY | R. Kravitz F. Mauldin Nov 1986 Jan 1987 Nov 1986 Jan 1987 |
| 5. OFFICE INSPECTION PRIOR TO REVIEW final review | | F. Mauldin | Jan 1987 |
| 6. APPLICATION OF FIELD EDIT DATA | | NA | NA |
| 7. COMPILATION SECTION REVIEW <u>Class III</u> | | F. Mauldin | Jan 1987 |
| 8. FINAL REVIEW <u>Class III</u> | | J. Hancock | Jan 1987 |
| 9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH | | J. Hancock | July 1987 |
| 10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH | | P. Dempsey | Sept. 1987 |
| 11. MAP REGISTERED - COASTAL SURVEY SECTION | | J. Rikon | Oct. 1987 |

TP-01246
COMPILATION SOURCES

1. COMPILATION PHOTOGRAPHY

| | | | | | | |
|---|----------|---|----------|--|--|---|
| CAMERA(S) Wild RC-10 (C) (C=88.46mm) | | TYPES OF PHOTOGRAPHY LEGEND (C) COLOR (P) PANCHROMATIC (I) INFRARED | | TIME REFERENCE ZONE Pacific MERIDIAN 120th | | <input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> DAYLIGHT |
| TIDE STAGE REFERENCE <input checked="" type="checkbox"/> PREDICTED TIDES <input type="checkbox"/> REFERENCE STATION RECORDS <input type="checkbox"/> TIDE CONTROLLED PHOTOGRAPHY | | | | | | |
| NUMBER AND TYPE | DATE | TIME | SCALE | STAGE OF TIDE | | |
| 83C(C) 0915-0917* | 11-25-83 | 10:49 | 1:30,000 | 1.9 feet below MHW | | |
| 83C(C) 0964-0968* | 11-25-83 | 11:25 | 1:30,000 | 1.8 feet below MHW | | |
| 83C(I) 0987-0988 | 11-26-83 | 10:18 | 1:30,000 | 1.6 feet below MHW | | |
| 83C(I) 1004-1005 | 11-26-83 | 10:27 | 1:30,000 | 1.6 feet below MHW | | |
| | | | | Mean Tide Range = 5.4 Ft. | | |
| 84C(I) 2207-2208 | 03-22-84 | 10:29 | 1:30,000 | 0.2 feet above MLLW | | |
| 84C(I) 2227-2228 | 03-22-84 | 10:44 | 1:30,000 | 0.1 feet above MLLW | | |
| | | | | Mean Tide Range = 4.6 Ft. | | |

REMARKS

*Compilation/bridging photographs.

Stage of tide for all photographs based on predicted tide data from Benicia, Army point

2. SOURCE OF MEAN HIGH-WATER LINE:

gage

The Mean High Water Line was compiled from office interpretation of the above listed compilation/bridging color photographs using stereo instrument methods.

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

There was no mean lower low water line compiled on this project.

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 |
|-------|----------|-------|------|
| None | Tp-01247 | None | None |

REMARKS

This large scale manuscript lies completely within the limits of TP-00525, scale 1:20,000, CM-7704, final reviewed Sept 1981.

TP=01246

HISTORY OF FIELD OPERATIONS

I. ☒ FIELD ~~INSPECTION~~ OPERATION (premarking) ☐ FIELD EDIT OPERATION

| OPERATION | NAME | DATE |
|-------------------------------------|---|--------------|
| 1. CHIEF OF FIELD PARTY | R. Melby | Mar-May 1983 |
| 2. HORIZONTAL CONTROL | RECOVERED BY R. Melby | Mar 1983 |
| | ESTABLISHED BY R. Melby | Mar 1983 |
| | PRE-MARKED OR IDENTIFIED BY R. Melby | Mar 1983 |
| 3. VERTICAL CONTROL | RECOVERED BY NA | |
| | ESTABLISHED BY NA | |
| | PRE-MARKED OR IDENTIFIED BY NA | |
| 4. LANDMARKS AND AIDS TO NAVIGATION | RECOVERED (Triangulation Stations) BY NA | |
| | LOCATED (Field Methods) BY NA | |
| | IDENTIFIED BY NA | |
| 5. GEOGRAPHIC NAMES INVESTIGATION | TYPE OF INVESTIGATION <input type="checkbox"/> COMPLETE <input type="checkbox"/> SPECIFIC NAMES ONLY BY <input checked="" type="checkbox"/> NO INVESTIGATION | |
| 6. PHOTO INSPECTION | CLARIFICATION OF DETAILS BY None | |
| 7. BOUNDARIES AND LIMITS | SURVEYED OR IDENTIFIED BY NA | |

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED

premarked (paneled)

2. VERTICAL CONTROL IDENTIFIED

None

PHOTO NUMBER

STATION NAME

83Z(C)4172*

AMSCO, 1949 (subpoint paneled)

PHOTO NUMBER

STATION DESIGNATION

*refer to Photogrammetric Plot
Report Item #23

3. PHOTO NUMBERS (Clarification of details)

None

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED

None

PHOTO NUMBER

OBJECT NAME

PHOTO NUMBER

OBJECT NAME

5. GEOGRAPHIC NAMES:

☐ REPORT☒ NONE

6. BOUNDARY AND LIMITS:

☐ REPORT☒ NONE

7. SUPPLEMENTAL MAPS AND PLANS

None

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

1 Form 76-53 (CSI Card)

1 EDM Form

1 Page, Field Observations

1 Project Field Report

I. MANUSCRIPT COPIES

| COMPILATION STAGES | | | DATE MANUSCRIPT FORWARDED | |
|----------------------|----------|----------------------|---------------------------|-----------------------|
| DATA COMPILED | DATE | REMARKS | MARINE CHARTS | HYDRO SUPPORT |
| Compilation Complete | Jan 1987 | Class III manuscript | None | None |
| Final Review | Jan 1987 | Final Class III Map | Aug. 1987 | Jan 1987 July 1987 |
| | | | | |
| | | | | |

II. LANDMARKS AND AIDS TO NAVIGATION N/A

1. REPORTS TO MARINE CHART DIVISION, NAUTICAL DATA BRANCH

| NUMBER | CHART LETTER NUMBER ASSIGNED | DATE FORWARDED | REMARKS |
|--------|---------------------------------|-------------------|--------------------------|
| | | | Not required for project |
| | | | |
| | | | |
| | | | |
| | | | |
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| | | | |

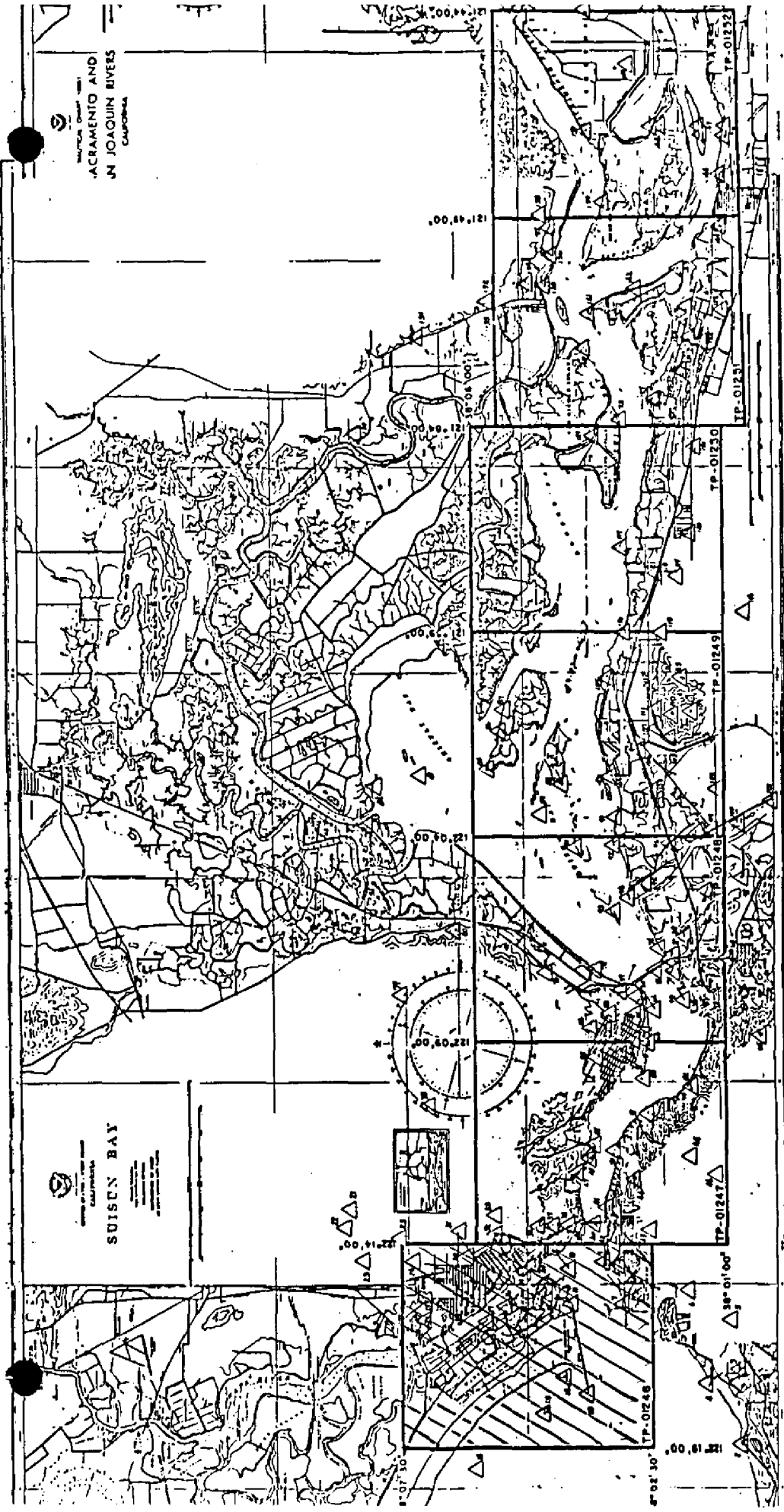
2. ☐ REPORT TO MARINE CHART DIVISION, COAST PILOT BRANCH. DATE FORWARDED: _____
3. ☐ REPORT TO AERONAUTICAL CHART DIVISION, AERONAUTICAL DATA SECTION. DATE FORWARDED: _____

III. FEDERAL RECORDS CENTER DATA

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

IV. SURVEY EDITIONS (This section shall be completed each time a new map edition is registered)

| SECOND EDITION | SURVEY NUMBER TP - _____ (2) | JOB NUMBER PH - _____ | TYPE OF SURVEY <input type="checkbox"/> REVISED <input type="checkbox"/> RESURVEY MAP CLASS <input type="checkbox"/> II. <input type="checkbox"/> III. <input type="checkbox"/> IV. <input type="checkbox"/> V. <input type="checkbox"/> FINAL |
|----------------|---------------------------------|--------------------------|---|
| | DATE OF PHOTOGRAPHY | DATE OF FIELD EDIT | |
| THIRD EDITION | SURVEY NUMBER TP - _____ (3) | JOB NUMBER PH - _____ | TYPE OF SURVEY <input type="checkbox"/> REVISED <input type="checkbox"/> RESURVEY MAP CLASS <input type="checkbox"/> II. <input type="checkbox"/> III. <input type="checkbox"/> IV. <input type="checkbox"/> V. <input type="checkbox"/> FINAL |
| | DATE OF PHOTOGRAPHY | DATE OF FIELD EDIT | |
| FOURTH EDITION | SURVEY NUMBER TP - _____ (4) | JOB NUMBER PH - _____ | TYPE OF SURVEY <input type="checkbox"/> REVISED <input type="checkbox"/> RESURVEY MAP CLASS <input type="checkbox"/> II. <input type="checkbox"/> III. <input type="checkbox"/> IV. <input type="checkbox"/> V. <input type="checkbox"/> FINAL |
| | DATE OF PHOTOGRAPHY | DATE OF FIELD EDIT | |



ACRAMENTO AND
IN JOAQUIN RIVERS
CALIFORNIA

SUISUN BAY
CALIFORNIA

JOB CM-8305
CARQUINEZ STRAIT AND SOUTHERN SUISUN BAY
CALIFORNIA
SHORELINE MAPPING
SCALE=1:10,000

- LEGEND:
- = 1:30,000 Color (Bridging)
 - = 1:30,000 Color (Competition)
 - ◐ = 1:30,000 Black & White (Infrared) MINW
 - ◑ = 1:30,000 Black & White (Infrared) MLLW

Scale Photo Coverage
1:30,000

SUMMARY TO ACCOMPANY
DESCRIPTIVE REPORTS
TP-01246

This final Class III shoreline map is one of seven 1:10,000 scale maps (TP-01246 through TP-01252) that comprise project CM-8305, Carquinez Strait and Southern Suisun Bay, California.

The purpose of this map is to provide current charting information for nautical chart maintenance and to furnish support data for scheduled hydrographic activity.

This map portrays the shoreline of Mare Island Strait and the entrance to Carquinez Strait at the eastern border of San Pablo Bay. This map defines the western limit of the project.

Field work prior to compilation consisted of the recovery, establishment and identification, by premarking methods, of horizontal control necessary for aerotriangulation. This activity was accomplished in March 1983, just prior to aerial photography. One supplemental photo substitute point was also provided in April 1983 after the original photo mission was completed.

Photo coverage for the project was provided in three stages. The original color bridging photographs were furnished March 15 and 31, 1983 with the Wild RC 10(Z) camera. However, flooded conditions did not permit this premarked photography to be bridged. Consequently, color photographs for bridging/compilation and supplemental black-and-white infrared photographs for interpretation assistance were obtained in November 1983 with the Wild RC 10(C) camera. Using the same "C" camera, additional supplemental black-and-white infrared photographs were provided in March 1984 to complement the interpretation of detail. All project photographs were taken at 1:30,000 scale. The appropriate tide stage for each flight line was determined from predicted tide data.

Analytic aerotriangulation was adequately provided by the Washington Science Center in November 1984. Flooded conditions observed on the original bridging photographs required the transferring of the premarked horizontal control stations to the re flown bridging photographs. Refer to the Photogrammetric Plot Report attached with this Descriptive Report.

Compilation, based upon office interpretation of the color photographs, was performed at the Coastal Mapping Unit, Atlantic Marine Center in January 1987. Interpretation of detail was complemented by use of the infrared photographs. A preliminary manuscript compiled from the same source material by the Pacific Marine Center, Photogrammetric Unit in June 1986 was used as a primary resource for shoreline delineation.

SUMMARY

Final review for this Class III map was performed at the Atlantic Marine Center in January 1987. A Chart Maintenance Print and a Notes to Hydrographer Print were prepared and forwarded to their appropriate units.

The Descriptive Report describes all pertinent information used in map production. The original base manuscript and related data were forwarded to the Washington Science Center for registration.

FIELD INSPECTION

TP-01246

There was no field inspection prior to compilation. Field work accomplished consisted of aerial photography and the recovery, establishment and identification (premarking) of horizontal control necessary for aerotriangulation.



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Ocean Service
Pacific Marine Center
1801 Fairview Avenue East
Seattle, Washington 98102

May 5, 1983

N/MOP222/RBM

TO: N/CG2313 - Howard D. Wolfe

FROM: N/MOP222 - Robert B. Melby

SUBJECT: Photo Field Operations Report; Job CM-8305, Carquinez Strait and Southern Suisun Bay, California

This report covers the area of Carquinez Strait and Southern Suisun Bay, California. The project was assigned to the Pacific Photo Party, Seattle, Washington, to place air photo targets on selected horizontal control stations to control aerotriangulation of the aerial photography.

A white, plastic panel was placed in each of the preselected areas. The panels were secured by lath and stakes. Distances and directions were determined in the field to permit the determination of the coordinates of each center panel. In preselected area #3, station NADEEN 1955 was paneled by the sub.pt. method. When the paneling material was removed later, the center panel was found to be badly torn by cattle. The panel may have been in good condition when the photography was flown. If the photo-image of the center panel is questionable, an alternate photo-identifiable object was selected, and the distance and azimuth was determined to it as a back-up point.

In area #6, the panel is listed as SHERMAN 1931 SUB PT B. Sub pt A, utilizing the same horizontal control station, is a paneled sub.pt. in adjoining Project CM-8304.

No additional horizontal control was established or required.

The paneled station field data has been entered on a Form 76-53, Control Station Identification.

No particular problems were encountered except for unseasonably heavy rains and high water that effected the logistics to a minor degree.



PHOTOGRAMMETRIC PLOT REPORT
CM-8305

CARQUINEZ STRAIT AND SOUTHERN SUISUN BAY, CALIFORNIA

NOVEMBER 1984

21. AREA COVERED

This report covers the area of Carquinez Strait and Southern Suisun Bay, California. The project consists of seven 1:10,000-scale sheets; TP-01246 through TP-01252.

22. METHOD

Four strips of 1:30,000-scale color photographs were bridged by analytic aerotriangulation methods.

The measurements were made using the National Ocean Service Analytic Plotter (NOSAP) under control of the STK simulation program.

Tie points were used to ensure adequate junction of all strips and, in addition, were used as supplemental control for strip #30-2A and strip #30-2B.

Ratio values were determined for the 1:30,000 bridging photographs and for the 1:30,000 MLLW and MHW infrared photographs. A copy of these values and sketches of the photo coverage are attached to this report.

Base sheets were plotted on the Calcomp 718 plotter using the Lambert Conformal State Plane Coordinate System, California Zone 3.

23. ADEQUACY OF CONTROL

The control was adequate. Horizontal control stations were premarked for "Z" camera photographs which were flown on March 15 and March 31, 1983. These photographs were not used for bridging because they were taken under flooded conditions. The positions of the premarked stations were transferred, using PUG methods, to "C" camera color bridging photographs which were flown on November 25, 1983.

Two stations, CT 74 USN 1954 Sub. Point and Sherman 1931 Sub. Point could not be successfully transferred. Landmarks and fixed aids to navigation were used as control in these areas as well as supplemental control in other areas of the project.

A listing of closures to control is attached.

24. SUPPLEMENTAL DATA

USGS topographic quadrangles were used to obtain vertical control for bridging. NOS nautical charts were used to locate aids and landmarks.

25. PHOTOGRAPHY

The coverage, overlap, and quality of the photographs were adequate for the job.

Submitted by:

Vic McNeel
Vic McNeel

Approved and Forwarded:

Don O. Norman

Don O. Norman
Chief, Aerotriangulation Unit

FIT TO CONTROL

▲ = Transferred paneled stations held in adjustment

● = Other positions used as control

■ = Tie points used as control

STRIP #30-1

| | <u>STATION NAMES</u> | <u>POINT NO.</u> | <u>VALUES IN FEET</u> | |
|------|--|------------------|-----------------------|----------|
| | | | <u>X</u> | <u>Y</u> |
| ▲ 1. | Amsco 1949, Sub Point | 916101 | -2.9 | +2.0 |
| | Mare Island Strait Light 1 | 967150 | -0.8 | +0.5 |
| | Mare Island Strait Light 2 | 967151 | +1.1 | +1.9 |
| | Nadeen 1955, Sub Point Panel | 917101 | +1.2 | -3.3 |
| | Nadeen 1955, Sub Point Alt. | 917102 | +0.4 | -0.1 |
| ● 2. | Carquinez Strait Light 20 | 969150 | +0.7 | -1.2 |
| | Carquinez Strait Light 22 | 969151 | -1.8 | +1.4 |
| | Carquinez Strait Light 23 | 970150 | -0.1 | -0.7 |
| ● 3. | Exxon Refinery Stack, 1977 | 953141 | +3.8 | -1.6 |
| ● 4. | Nichols Allied Chem. Tank | 924140 | -0.5 | -3.5 |
| | Pittsburg Shell Chemical Co. Water Tank, 1932 | 925140 | -0.6 | +0.4 |
| | Pittsburg, Stockton Firebrick Co. Water Tank, 1932 | 926140 | -2.1 | +0.1 |
| | | | | |
| ● 5. | Pittsburg, Johns Manville Co. Water Tank | 927140 | -1.0 | +2.9 |
| | Pittsburg, Columbia Steel Co. Canal Tank, 1950, Sub Point | 928101 | -0.8 | +6.2 |
| | | | | |
| ● 6. | Pittsburg, Columbia Steel Co. Canal Tank 1950 | 928100 | -1.8 | +3.0 |
| | Pittsburg, Columbia Steel Co. River Water Tank, 1950 | 928141 | -0.4 | +1.4 |
| | San Joaquin River Lt. 19 | 932151 | -1.2 | -4.2 |
| | | | | |
| ● 7. | San Joaquin River Lt. 23 | 933150 | +1.7 | -1.6 |
| | San Joaquin River Lt. 24 | 933151 | +1.0 | -0.3 |

STRIP #30-2A

| | | | | |
|-------|--|--------|------|------|
| | San Joaquin River Lt. 24 | 933151 | +1.9 | +1.0 |
| ● 8. | San Joaquin River Lt. 25 | 939150 | +2.2 | +1.4 |
| | San Joaquin River Lt. 26 | 939151 | -1.1 | +0.6 |
| ● 9. | San Joaquin River Lt. 29 | 939154 | -1.8 | -0.7 |
| | Tie From Strip #30-1 | 933801 | +2.3 | -2.9 |
| ■ 10. | Tie From Strip #30-1 | 933802 | +0.8 | -2.3 |
| | Tie From Strip #30-1 | 933803 | +1.6 | -2.1 |
| | Sacramento River Deep Water Ship Channel Lt. 15 | 940150 | -3.0 | -0.9 |
| ● 11. | Sacramento River Deep Water Ship Channel Lt. 17 | 940151 | -4.1 | +0.1 |
| | Tie From Strip #30-1 | 930801 | +6.4 | -3.1 |
| ■ 12. | Tie From Strip #30-1 | 930802 | +4.6 | -0.2 |
| | Tie From Strip #30-1 | 930803 | +4.4 | -1.0 |
| | Tie From Strip #30-1 | 926801 | -1.6 | +0.3 |
| | Tie From Strip #30-1 | 926802 | -0.3 | +1.0 |
| ■ 13. | Tie From Strip #30-1 | 926803 | -1.0 | +1.2 |
| | Tie From Strip #30-1 | 924801 | -0.8 | +4.8 |
| | Tie From Strip #30-1 | 924802 | -3.2 | +1.8 |
| ■ 14. | Tie From Strip #30-1 | 924803 | -1.7 | +3.1 |
| | Tie From Strip #30-1 | 922801 | +0.1 | -0.2 |
| | Tie From Strip #30-1 | 922802 | 0.0 | +0.3 |
| ■ 15. | Tie From Strip #30-1 | 922803 | +1.0 | -2.6 |
| | Tie From Strip #30-1 | 922804 | +2.5 | -0.7 |
| | Tie From Strip #30-1 | 922805 | +2.2 | -3.3 |
| | Tie From Strip #30-1 | 922806 | -0.4 | -4.0 |

STRIP #30-2B

| | | | | |
|-------|-------------------------------|--------|------|------|
| | Tie From Strip #30-1 | 920801 | -2.1 | -1.4 |
| | Tie From Strip #30-1 | 920802 | -2.8 | -0.2 |
| | Tie From Strip #30-1 | 920803 | -4.1 | -5.1 |
| ● 16. | Green House, West Gable, 1939 | 952110 | +0.6 | +0.7 |
| ■ 17. | Tie From Strip #30-1 | 919801 | -0.7 | -2.0 |
| | Tie From Strip #30-1 | 919802 | -1.2 | -0.3 |
| | Tie From Strip #30-1 | 919803 | -1.6 | -2.0 |
| | Tie From Strip #30-1 | 919804 | +0.6 | -1.9 |

| | | | | |
|-------|----------------------|--------|------|------|
| ■ 18. | Tie From Strip #30-1 | 920801 | -1.9 | -0.8 |
| | Tie From Strip #30-1 | 920802 | -2.4 | +1.1 |
| | Tie From Strip #30-1 | 920803 | -3.7 | -3.3 |

| | | | | |
|------|----------------------------|--------|------|------|
| ● 3. | Exxon Refinery Stack, 1977 | 953141 | +2.1 | +2.6 |
|------|----------------------------|--------|------|------|

STRIP #30-3

| | | | | |
|-------|---|--------|------|------|
| ▲ 19. | Long Pond 2 RM3 Panel | 964101 | +0.4 | 0.0 |
| | Vallejo Park Circle Tank | 966141 | +6.6 | +2.4 |
| ● 20. | Mare Island USN Stack | 966140 | -2.2 | 0.0 |
| | Carquinez Strait, Range Target No. 1, 1932 | 966150 | +2.6 | +1.0 |
| | Carquinez Strait, Range Target No. 2, 1932 | 966151 | +0.8 | +1.9 |
| ▲ 1. | Amsco 1949, Sub Point | 916101 | -1.4 | +2.1 |
| | Tie From Strip #30-1 | 916801 | +0.5 | -2.6 |
| | Tie From Strip #30-1 | 916802 | +1.4 | -1.3 |
| | Tie From Strip #30-1 | 916803 | +0.7 | -2.1 |
| | Mare Island Strait Lt. 1 | 967150 | +1.9 | -3.1 |
| ▲ 21. | Mare Island Strait Lt. 2 | 967151 | +2.8 | -0.9 |
| ▲ 2. | Carquinez Strait Lt. 20 | 969150 | +0.5 | -1.6 |
| ▲ 22. | Nadeen 1955, Sub Pt. Panel | 917101 | +0.6 | -0.3 |
| | Nadeen 1955, Sub Pt. Alt. | 917102 | +0.5 | -1.6 |
| | Carquinez Strait Lt. 22 | 969151 | -1.6 | +1.2 |
| ● | Carquinez Strait Lt. 23 | 970150 | -0.7 | +0.8 |

RATIO VALUES

CM-B305

1:30,000 Bridging Photographs

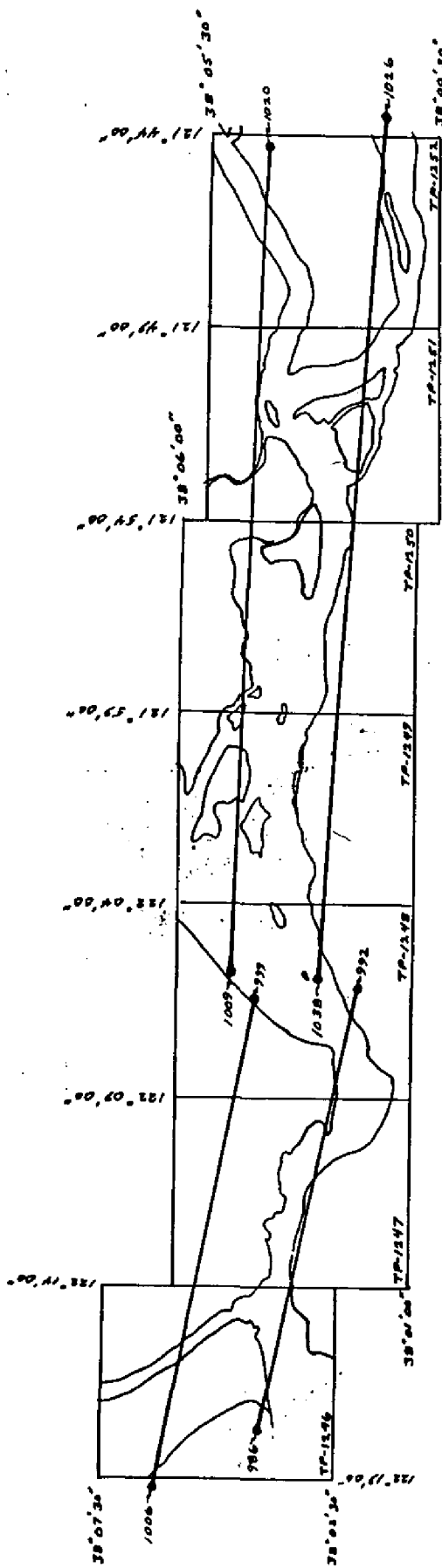
| | <u>Ratio Value</u> |
|-----------------|--------------------|
| 83-C(C) 915-933 | 3.125 |
| 938-950 | 3.124 |
| 951-953 | 3.128 |
| 964-965 | 3.120 |
| 966-967 | 3.127 |
| 968 | 3.142 |
| 969 | 3.036 |
| 970 | 3.072 |

MLLW 1:30,000 Black-and-White Infrared

| | <u>Ratio Value</u> |
|-------------------|--------------------|
| 84-C(R) 2207-2213 | 3.04 |
| 2220-2229 | 3.02 |
| 2235-2245 | 3.04 |
| 2251-2261 | 3.04 |

MHW 1:30,000 Black-and-White Infrared

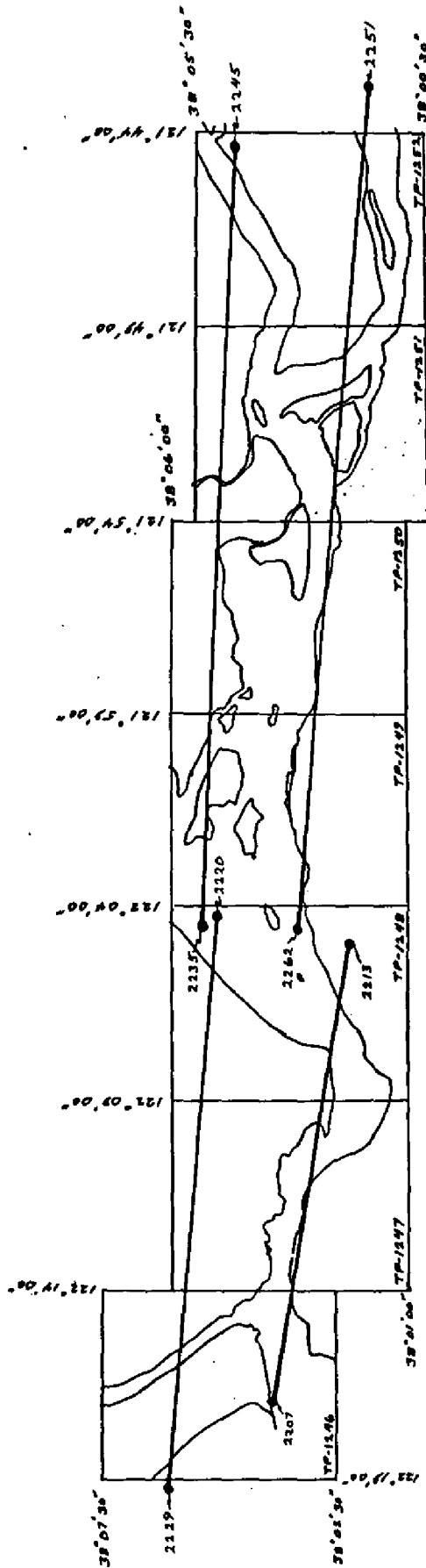
| | <u>Ratio Value</u> |
|-----------------|--------------------|
| 83-C(R) 986-992 | 2.97 |
| 999-1006 | 2.98 |
| 1009-1020 | 2.97 |
| 1026-1038 | 2.96 |



MINI BLACK AND WHITE INFRARED PHOTOGRAPH.

B3 C (R) 1:30,000 SCALE

JOB CM-8305
CARQUINEZ STRAIT AND SOUTHERN SUISUN BAY
CALIFORNIA
SHORELINE MAPPING
SCALE 1:10,000



JOB CM-8305
CARQUINEZ STRAIT AND SOUTHERN SUISUN BAY
CALIFORNIA
SHORELINE MAPPING
SCALE=1:10,000

MLLW BLACK AND WHITE IMPRINTED PHOTOGRAPH
84 C (R) 1:30,000 SCALE

DESCRIPTIVE REPORT CONTROL RECORD

| MAP NO. | | JOB NO. | | GEODEIC DATUM | | ORIGINATING ACTIVITY | | REMARKS |
|--|-------------------------------|--------------------------------|--------------------------|---------------|---------------------|--|---------------------------|---------|
| TP-01246 | | CM-8305 | | 1927 N.A. | | Coastal Mapping Unit, AMC, Norfolk, VA | | |
| STATION NAME | SOURCE OF INFORMATION (Index) | AEROTRIANGULATION POINT NUMBER | COORDINATES IN FEET | | GEOGRAPHIC POSITION | | REMARKS | |
| | | | STATE | ZONE | ϕ LATITUDE | λ LONGITUDE | | |
| Carquinez Strait, Range Target No. 1, 1932 | Quad 381222 Sta 1187 | 966150 | X= | | ϕ | 38° 04' 17.037" | | |
| | | | Y= | | λ | 122° 17' 17.535" | | |
| Carquinez Strait, Range Target No. 2, 1932 | Quad 381222 Sta 1188 | 966151 | X= | | ϕ | 38° 04' 40.120" | | |
| | | | Y= | | λ | 122° 18' 08.926" | | |
| Mare Island Strait Light 1 | G-17104 #822 | 967150 | X= | | ϕ | 38° 04' 15.828" | Unadjusted field position | |
| | | | Y= | | λ | 122° 14' 47.477" | | |
| Mare Island Strait Light 2 | G-17104 #823 | 967151 | X= | | ϕ | 38° 04' 10.932" | Unadjusted field position | |
| | | | Y= | | λ | 122° 14' 37.355" | | |
| AMSCO, 1949 | Quad 381222 Sta 1056 | 916100 | X= | | ϕ | 38° 03' 29.879" | | |
| | | | Y= | | λ | 122° 14' 34.694" | | |
| MARE IS USN STACK | G-17104 #824 | 966140 | X= | | ϕ | 38° 06' 00.8326" | Unadjusted field position | |
| | | | Y= | | λ | 122° 16' 13.4129" | | |
| | | | X= | | ϕ | | | |
| | | | Y= | | λ | | | |
| | | | X= | | ϕ | | | |
| | | | Y= | | λ | | | |
| | | | X= | | ϕ | | | |
| | | | Y= | | λ | | | |
| | | | X= | | ϕ | | | |
| | | | Y= | | λ | | | |
| | | | X= | | ϕ | | | |
| | | | Y= | | λ | | | |
| COMPUTED BY | | | COMPUTATION CHECKED BY | | DATE | | | |
| LISTED BY | | | LISTING CHECKED BY | | DATE | | | |
| HAND PLOTTING BY | | | HAND PLOTTING CHECKED BY | | DATE | | | |

SUPERSEDES NOAA FORM 76-41, 2-71 EDITION WHICH IS OBSOLETE.

COMPILATION REPORT
TP-01246

31 - DELINEATION

The majority of this map corresponds to a preliminary map which was compiled by the Pacific Marine Center, Photogrammetric Unit in the summer of 1986. This map as well as the previous preliminary map were compiled from office interpretation of the same 1983 1:30,000 scale color photographs using a Wild B-8 stereo instrument. Tide coordinated infrared ratio photographs dated 1983 for mean high water and 1984 for mean lower low water were provided to assist in interpretation of shoreline and offshore detail. Delineation for this map was primarily the same as the preliminary map; however, some minor revisions were made based on a close comparison with the infrared ratio photographs. Also, additional interior detail was compiled.

All photographs used to compile this map are listed on NOAA form 76-36B. Photo coverage and quality were adequate.

32 - CONTROL

The horizontal control was adequate. Refer to the Photogrammetric Plot Report, dated November 1984.

33 - SUPPLEMENTAL DATA

None.

34 - CONTOURS AND DRAINAGE

Contours are not applicable to the project. Drainage was compiled from office interpretation of the photographs.

35 - SHORELINE AND ALONGSHORE DETAILS

The mean high water line was compiled from office interpretation of the compilation/bridging photographs as described in item #31. There was no mean lower low water line compiled on this map.

36 - OFFSHORE DETAILS

Offshore details were compiled by instrument methods as described in item #31.

37 - LANDMARKS AND AIDS

The investigation and mapping of charted landmarks and aids to navigation are not required. These features were previously compiled on project CM-7704, sheet TP-00525, at a scale of 1:20,000.

38 - CONTROL FOR FUTURE SURVEYS

None

39 - JUNCTIONS

Refer to the Data Record Form 76-36B, item 5, of the Descriptive Report.

40 - HORIZONTAL AND VERTICAL ACCURACY

See item 32.

46 - COMPARISON WITH EXISTING MAPS

A comparison was made with the following U. S. Geological Survey Quadrangles:

- Mare Island, California; dated 1959, photo revised 1980; scale 1:24,000
- Benicia, California; dated 1959, photo revised 1980; scale 1:24,000

Also a comparison was made with a copy of the 1:20,000 scale 1981 final reviewed Class III Map and the 1981 Revision Survey Map of TP-00525, shoreline mapping project CM-7704.

47 - COMPARISON WITH NAUTICAL CHARTS

A comparison was made with the following National Ocean Service Charts:

- 18652; 24th edition; dated September 14, 1985; scale 1:40,000 and 1:80,000
- 18654; 33rd edition; dated January 26, 1985; scale 1:40,000
- 18655; 52nd edition; dated July 14, 1984; scale 1:10,000
- 18656; 46th edition; dated January 19, 1985; scale 1:40,000

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

None

ITEMS TO BE CARRIED FORWARD

None

Submitted by:
Robert R. Kravitz
Robert R. Kravitz
Cartographic Technician
Nov. 21, 1986

Approved:
James L. Byrd, Jr.
James L. Byrd, Jr.
Chief, Coastal Mapping Unit

JAN 14 1987

GEOGRAPHIC NAMES

FINAL NAME SHEET

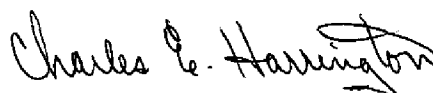
CM-8305 (Carquinez Strait & Southern Suisun Bay, CA)

TP-01246

Carquinez Heights
Carquinez Strait
Davis Point
Dutchman Slough
Guadacanal Village
Island No. 1
Mare Island
Mare Island Strait
Napa River

Oleum
San Pablo Bay
Sears Point
Selby
Southern Pacific (RR)
Tormey
Vallejo
Vallejo Heights

Approved:



Charles E. Harrington
Chief Geographer
Nautical Charting Division
Charting and Geodetic Services

61 - GENERAL STATEMENT

Final review for this final Class III map was accomplished at the Atlantic Marine Center in January 1987. For a schedule of the office and field operations, refer to the Summary included with this Descriptive Report.

62 - COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS

A comparison was made with a copy of Class III Map TP-00525, CM-7704, 1:20,000 scale, final reviewed Sept. 1981 and with the 1981 Revision Survey Map TP-00525 compiled from 1981 photographs. Some changes to shoreline and alongshore cultural detail have occurred since the 1981 photography and the 1983/1984 photographs used to compile this map.

63 - COMPARISON WITH MAPS OF OTHER AGENCIES

A comparison was made with the following U.S. Geological Survey Quadrangles: Mare Island, California; dated 1959, photo revised 1980, scale 1:24,000; Benicia, California; dated 1959, photo revised 1980, scale 1:24,000.

64 - COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS

No contemporary hydrographic survey was performed prior to map compilation.

65 - COMPARISON WITH NAUTICAL CHARTS

A comparison was made with the following NOS charts:
18655, 52nd edition, July 14, 1984, scale 1:10,000
18654, 33rd edition, Jan. 26, 1985, scale 1:40,000

66 - ADEQUACY OF RESULTS AND FUTURE SURVEYS

This map complies with the Project Instructions, and meets the requirements for National Standards of Map Accuracy.

Submitted by

Jerry L. Hancock
Jerry L. Hancock
Final Reviewer

Approved for forwarding

Billy H. Barnes
Billy H. Barnes
Chief, Photogrammetric Section, AMC

Approved

Lucy O. Robson *A. Y. Bishop*
Chief, Photogrammetric Production Sec. Chief, Photogrammetry Branch

