

TP-01247

TP-01247

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-01247

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 SUISUN BAY

Locality

CROCKETT

19<sub>83</sub> TO 19

REGISTERED IN ARCHIVES

DATE

NOAA FORM 76-36A (3-72)		U. S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.					
<b>DESCRIPTIVE REPORT - DATA RECORD</b>		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">           TYPE OF SURVEY  <input checked="" type="checkbox"/> ORIGINAL  <input type="checkbox"/> RESURVEY  <input type="checkbox"/> REVISED         </td> <td style="width: 50%;">           SURVEY TP01247            MAP EDITION NO. (1)            MAP CLASS III(Final)            JOB PH-CM-8305         </td> </tr> </table>		TYPE OF SURVEY <input checked="" type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED	SURVEY TP01247 MAP EDITION NO. (1) MAP CLASS III(Final) JOB PH-CM-8305		
TYPE OF SURVEY <input checked="" type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED	SURVEY TP01247 MAP EDITION NO. (1) MAP CLASS III(Final) JOB PH-CM-8305						
PHOTOGRAMMETRIC OFFICE Coastal Mapping Unit, Atlantic Marine Center, Norfolk, VA		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="2" style="text-align: center;"> <b>LAST PRECEDING MAP EDITION</b> </td> </tr> <tr> <td style="width: 50%;">           TYPE OF SURVEY  <input type="checkbox"/> ORIGINAL  <input type="checkbox"/> RESURVEY  <input type="checkbox"/> REVISED         </td> <td style="width: 50%;">           JOB PH-            MAP CLASS            SURVEY DATES:            19__ TO 19__         </td> </tr> </table>		<b>LAST PRECEDING MAP EDITION</b>		TYPE OF SURVEY <input type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED	JOB PH- MAP CLASS SURVEY DATES: 19__ TO 19__
<b>LAST PRECEDING MAP EDITION</b>							
TYPE OF SURVEY <input type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED	JOB PH- MAP CLASS SURVEY DATES: 19__ TO 19__						
OFFICER-IN-CHARGE  A. Y. Bryson, CDR							
<b>I. INSTRUCTIONS DATED</b>							
<b>1. OFFICE</b>		<b>2. FIELD</b>					
Aerotriangulation November 1, 1984  Compilation October 2, 1986		Control March 9, 1983  Change No. 1 March 16, 1983					
<b>II. DATUMS</b>							
<b>1. HORIZONTAL:</b> <input checked="" type="checkbox"/> 1927 NORTH AMERICAN		OTHER (Specify)					
<b>2. VERTICAL:</b> <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)					
<b>3. MAP PROJECTION</b>  Lambert Conformal		<b>4. GRID(S)</b> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">STATE California</td> <td style="width: 50%;">ZONE 3</td> </tr> </table>		STATE California	ZONE 3		
STATE California	ZONE 3						
<b>5. SCALE</b> 1:10,000		STATE ZONE					
<b>III. HISTORY OF OFFICE OPERATIONS</b>							
<b>OPERATIONS</b>		<b>NAME</b>	<b>DATE</b>				
<b>1. AEROTRIANGULATION</b> BY V. McNeel Nov 1984 METHOD: Analytic LANDMARKS AND AIDS BY NA							
<b>2. CONTROL AND BRIDGE POINTS</b> PLOTTED BY N. McNeel Nov 1984 METHOD: Calcomp 718 CHECKED BY D. Norman Nov 1984							
<b>3. STEREOSCOPIC INSTRUMENT</b> PLANIMETRY BY P. Evans Nov 1986 COMPILATION CHECKED BY F. Mauldin, J. Byrd Nov 1986 INSTRUMENT: Wild B-8 SCALE: 1:10,000 CONTOURS BY NA CHECKED BY NA							
<b>4. MANUSCRIPT DELINEATION</b> PLANIMETRY BY P. Evans Nov 1986 CHECKED BY F. Mauldin Jan 1987 METHOD: Smooth drafted CONTOURS BY NA CHECKED BY NA SCALE: 1:10,000 HYDRO SUPPORT DATA BY P. Evans Nov 1986 CHECKED BY F. Mauldin Jan 1987							
<b>5. OFFICE INSPECTION PRIOR TO FINAL REVIEW</b> BY F. Mauldin Jan 1987							
<b>6. APPLICATION OF FIELD EDIT DATA</b> BY NA CHECKED BY NA							
<b>7. COMPILATION SECTION REVIEW</b> Class III BY F. Mauldin Jan 1987							
<b>8. FINAL REVIEW</b> Class III BY J. Hancock Jan 1987							
<b>9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH</b> BY J. Hancock July 1987							
<b>10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH</b> BY P. Dempsey Sept 1987							
<b>11. MAP REGISTERED - COASTAL SURVEY SECTION</b> BY J. Rikon Oct 1987							

TP-01247  
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	
TIDE STAGE REFERENCE <input checked="" type="checkbox"/> PREDICTED TIDES <input type="checkbox"/> REFERENCE STATION RECORDS <input type="checkbox"/> TIDE CONTROLLED PHOTOGRAPHY				<input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> DAYLIGHT	
NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE	
83C(C) 0916-0919 *	11-25-83	10:49	1:30,000	1.9 feet below MHW	
83C(I) 0989-0991	11-26-83	10:24	1:30,000	1.6 feet below MHW	
84C(I) 2209-2211	3-22-84	10:29	1:30,000	mean tide range 5.4 feet 0.2 feet above MLLW  mean tide range 4.6 feet	

## REMARKS

\*compilation/Bridging photographs  
stage of tide for all photographs based on predicted tide data from Benicia, Army point  
gage

## 2. SOURCE OF MEAN HIGH-WATER LINE:

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-01248 *TP-01057(1:20,000)	None	TP-01246 *TP-00525(1:20,000)

REMARKS \*This large scale manuscript falls within the limits of two previous registered project maps, TP-00525 (CM-7704) and TP-01057 (CM-7823).

TP-01247  
HISTORY OF FIELD OPERATIONSI. ☒ FIELD INSPECTION OPERATION (Premarking) ☐ FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	R. Melby	Mar-May 83
2. HORIZONTAL CONTROL	RECOVERED BY R. Melby ESTABLISHED BY R. Melby PRE-MARKED OR IDENTIFIED BY R. Melby	Mar 1983 Mar 1983 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 <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		2. VERTICAL CONTROL IDENTIFIED	
Premarked (Paneled)		NA	
PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION
83Z(C)4170*	NADEEN, 1955 (subpoint paneled)		
83Z(C)4170	NADEEN, 1955 (subpoint alternate identified, see item #8)		
*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 ☒ NONE6. 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)

2 Forms 76-53 (CSI cards), 1 Project Field Report

NOTE: An alternate Sub Pt. (building corner) for NADEEN was established in April 83 when field personnel realized that the premarked station may have been destroyed prior to photography.

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	July 1987 Jan 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

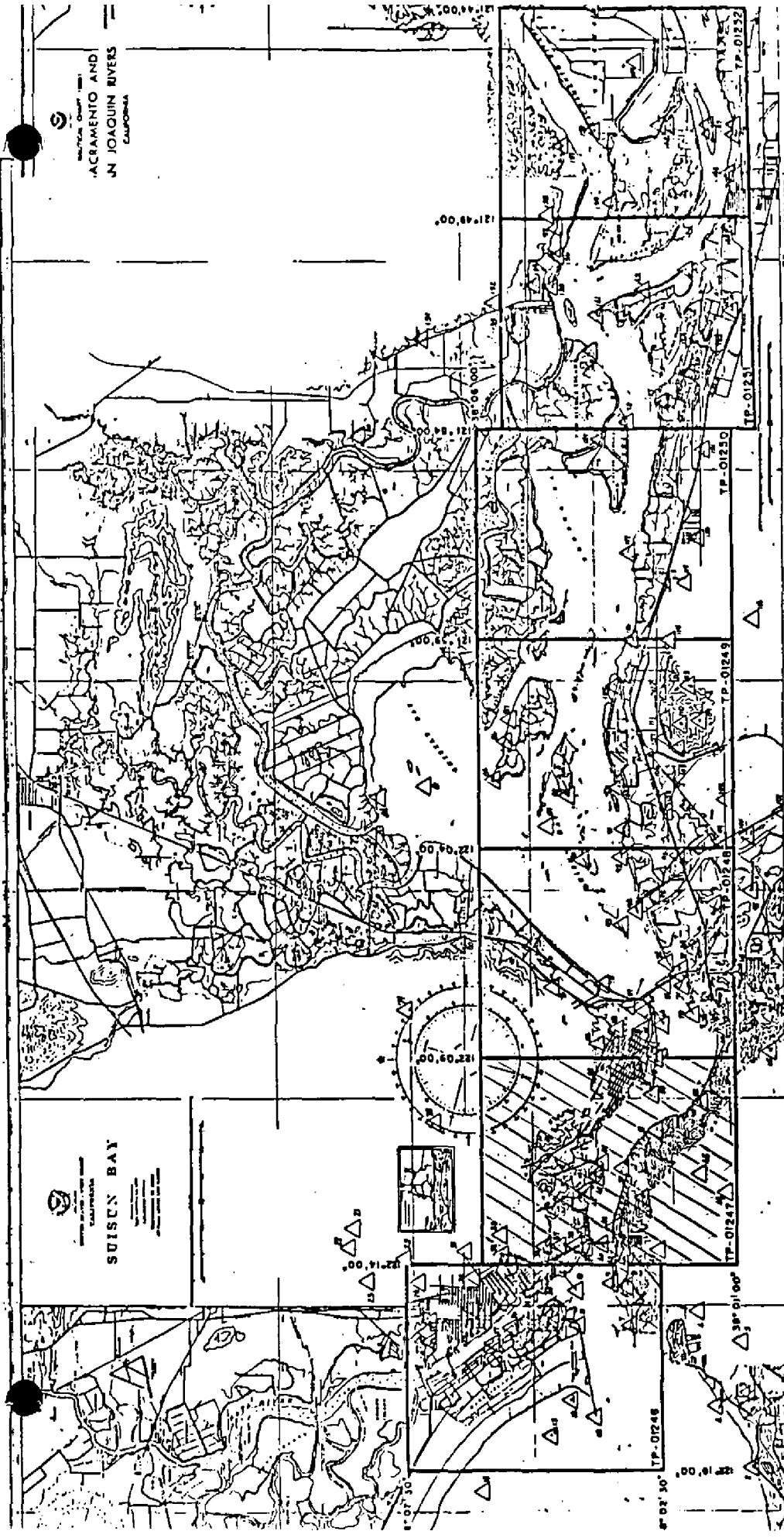
2. ☐ REPORT TO MARINE CHART DIVISION, COAST PILOT BRANCH. DATE FORWARDED: \_\_\_\_\_
3. ☐ REPORT TO AERONAUTICAL CHART DIVISION, AERONAUTICAL DATA SECTION. DATE FORWARDED: \_\_\_\_\_

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



**SUISUN BAY**  
CALIFORNIA

**SACRAMENTO AND  
SAN JOAQUIN RIVERS**  
CALIFORNIA

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

- LEGEND:**
- = 1:30,000 Color (Bridge)
  - = 1:30,000 Color (Coastline)
  - ◐ = 1:30,000 Black & White (Inland) MHW
  - ◑ = 1:30,000 Black & White (Inland) MLLW

**Scale Photo Coverage**  
1:30,000

SUMMARY TO ACCOMPANY  
DESCRIPTIVE REPORTS  
TP-01247

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 along a portion of Carquinez Strait just beyond the entrance at San Pablo Bay.

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. The western minute (122° 13.0' to 122° 14.0') of longitude on this map corresponds to a preliminary manuscript which was compiled from the same source data in June 1986 by the Pacific Marine Center, Photogrammetric Unit. Delineation of detail for this common area was basically the same except for three alongshore features which were omitted.

LAST NAME JONES	FIRST NAME A.	MIDDLE INITIAL D.	LOCATION 1015 10th St Rm 923	EXTENSION 6435772
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TOPOGRAPHIC SHEET NUMBER	REPORT (✓)	HYDROGRAPHIC SHEET NUMBER	REPORT (✓)	OTHER MATERIAL
TC-01247	✓			
TC-01248	✓			

☐ **Classified Material - Authorization:** This is to certify that the above named employee is authorized to use the classified material listed hereon.

SIGNATURE OF AUTHORIZED OFFICIAL

Received for Delivery . . . . .	SIGNATURE	DATE
Signature of Requester . . . . .	<i>[Signature]</i>	6-1-20
Received for Return to Vault . . . . .		



## INSTRUCTIONS

1. **PRINT** name of Requester, location (room and building) and phone.
2. Write **Only Consecutive Numbers** on this form.
3. Use a separate form for requesting **Classified Material**. (See 6 below).
4. Use blue for Hydrographic surveys and reports, pink for Topographic surveys and reports and white for all other material.
5. Copy number 1 (original) for Vault Numerical File - must be Signed and dated by Requester. Copy number 2 will be stamped "Canceled" and returned to Requester by Vault when Requester surrenders material. Copy number 3 for Vault Alphabetical File.
6. For withdrawal of **Classified Material** check the **Classified Material Box** and have an authorized official sign the **Authorization**.

## 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-01247

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: *Robert B. Melby*  
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
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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
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▲ 2.	Carquinez Strait Lt. 20	969150	+0.5	-1.6
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▲ 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-8305

1:30,000 Bridging Photographs

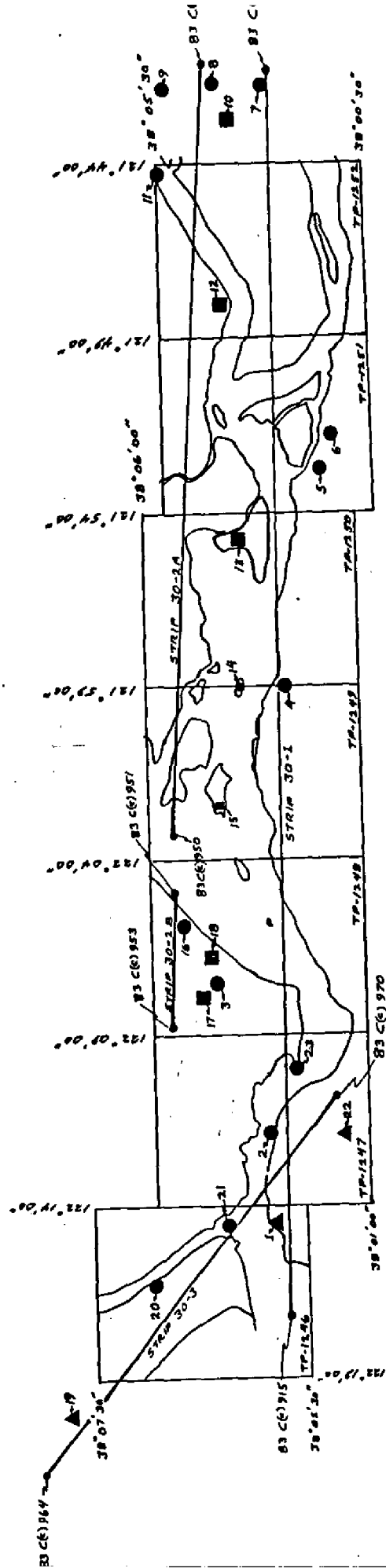
	<u>Ratio Value</u>
83-C(C) 915-933	3.125
938-950	3.124
951-953	3.128
964-965	3.120
966-967	3.127
968	3.142
969	3.036
970	3.072

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

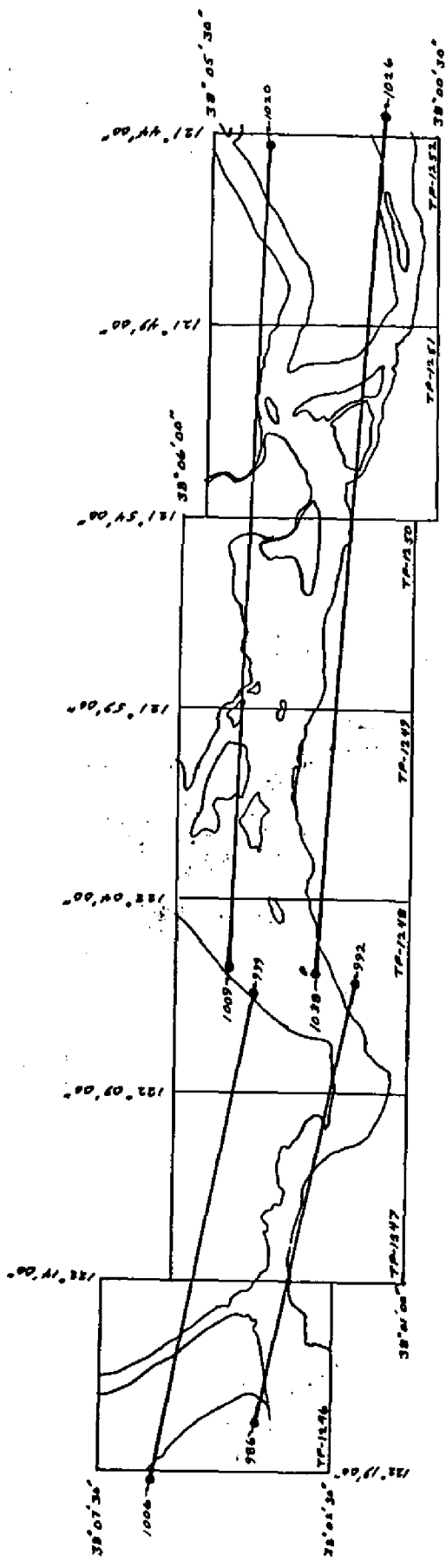
MHW 1:30,000 Black-and-White Infrared

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



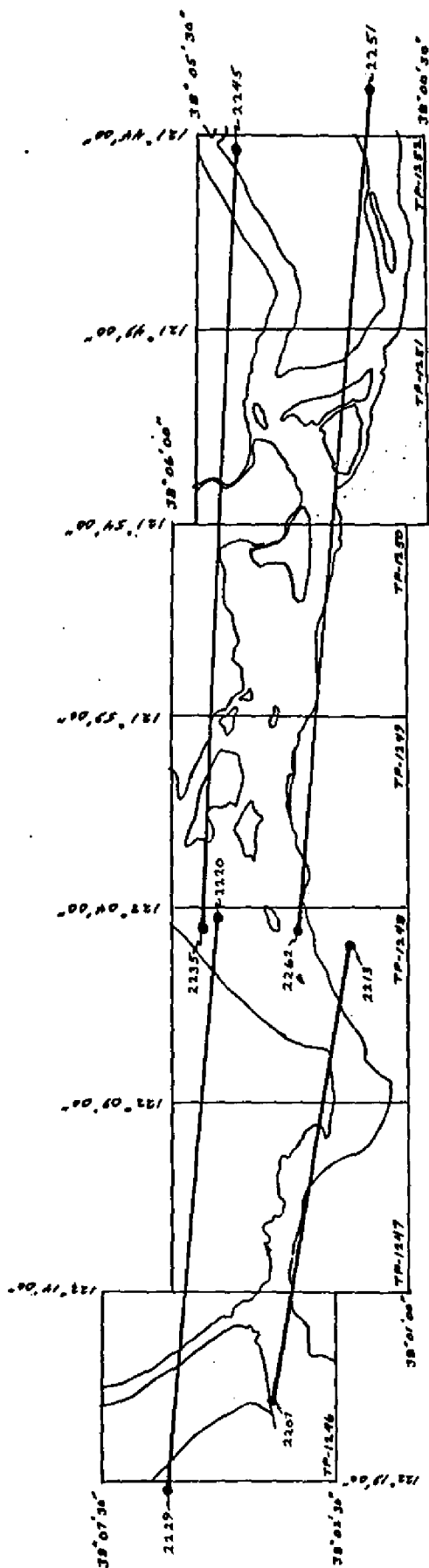
BRIDGING PHOTOGRAPHS  
1:30,000 SCALE  
HORIZONTAL CONTROL NEW  
▲ = PNEUMATIC STATIONS  
● = OTHER POSITIONS  
■ = TIDE GAUGE POINTS USED AS C

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

MHW BLACK AND WHITE INFRARED PHOTOGRAPHY.  
 83 C (R) 1:30,000 SCALE



ORIGINATING ACTIVITY	GEOGETIC DATUM
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TP-01247	STATION NAME	CM-8305	SOURCE OF INFORMATION (Index)	AEROTRIANGULATION POINT NUMBER	COORDINATES IN FEET STATE <u>California</u> ZONE <u>3</u>	GEOGRAPHIC POSITION		REMARKS
						$\phi$ LATITUDE	$\lambda$ LONGITUDE	
	Carquinez Strait Light 23	G-17104 #817		970150	X=	$\phi$ 38° 02' 36.717"	Unadjusted field position	
					Y=	$\lambda$ 122° 09' 58.952"		
	Carquinez Strait Light 20	G-17104 #814		969150	X=	$\phi$ 38° 03' 14.517"	Unadjusted field position	
					Y=	$\lambda$ 122° 11' 40.238"		
	Carquinez Strait Light 22	G-17104 #816		969151	X=	$\phi$ 38° 02' 55.991"	Unadjusted field position	
					Y=	$\lambda$ 122° 10' 57.428"		
	NADEEN, 1955	Quad 381222 Sta 1121		917100	X= 1,511,370.89	$\phi$ 38°-01' 44.356"	Recovered	
					Y= 561,141.20	$\lambda$ 122° 11' 47.342"		
						X=	$\phi$	
						Y=	$\lambda$	
						X=	$\phi$	
						Y=	$\lambda$	
					X=	$\phi$		
					Y=	$\lambda$		
					X=	$\phi$		
					Y=	$\lambda$		
					X=	$\phi$		
					Y=	$\lambda$		
					X=	$\phi$		
					Y=	$\lambda$		
					X=	$\phi$		
					Y=	$\lambda$		
					X=	$\phi$		
					Y=	$\lambda$		
COMPUTED BY					COMPUTATION CHECKED BY			DATE
LISTED BY					LISTING CHECKED BY			DATE
P. B. Kravitz					F. Mauldin			DATE
HAND PLOTTING BY					HAND PLOTTING CHECKED BY			DATE

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

# COMPILATION REPORT

TP-01247

## 31. DELINEATION:

Delineation was accomplished using stereo instrument compilation methods. Instrument compilation was used to delineate shoreline, alongshore, and interior detail based upon office interpretation of the 1:30,000 scale 1983 bridging/compilation color photographs. Tide coordinated infrared ratio photographs dated 1983 for mean high water and 1984 for mean lower low water, were used to assist in interpretation of the shoreline and offshore details.

All photographs used to compile this map are listed on NOAA form 76-36B. Photograph 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 detail was 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 investigated on projects CM-7704, TP-00525, and CM-7823, TP-01057, at a scale of 1:20,000.

TP-01247

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.G.S. Quadrangle, Benicia, California; dated 1959, photo revised 1980; scale 1:24,000

Class III Shoreline Map, TP-00525; CM-7704; scale 1:20,000

Class III Shoreline Map, TP-01057; CM-7823; scale 1:20,000

47. COMPARISON WITH NAUTICAL CHARTS:

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

18656; 46th edition; dated January 19, 1985; scale 1:40,000

18655; 52nd edition; dated July 14, 1984; scale 1:10,000

18657; 12th edition; dated November 24, 1984; scale 1:10,000

18654; 33rd edition; dated January 26, 1985; scale 1:40,000

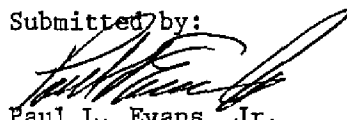
ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY:

None.

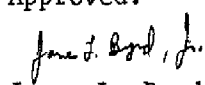
ITEMS TO BE CARRIED FORWARD:

None.

Submitted by:

  
Paul L. Evans, Jr.  
Cartographic Technician  
December 4, 1986

Approved:

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



JAN 14 1987

GEOGRAPHIC NAMES

FINAL NAME SHEET

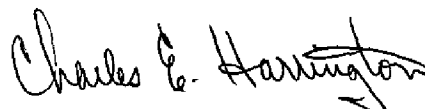
CM-8305 (Carquinez Strait & Southern Suisun Bay, CA)

TP-01247

Benicia  
Benicia Point  
Carquinez Strait  
Commodore Jones Point  
Crockett  
Dillon Point  
Eckley  
Elliot Cove  
Glencove  
Glen Cove

Morrow Cove  
Nevada Dock  
Ozol  
Point Carquinez  
Port Costa  
Semple Point  
Southampton Bay  
Southern Pacific (RR)  
Valona

Approved:



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

REVIEW REPORT  
TP-01247

SHORELINE

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. A copy of registered Class III map TP-01057, 1:20,000 scale, CM-7823, which junctions with CM-7704, was also compared.

63 - COMPARISON WITH MAPS OF OTHER AGENCIES

A comparison was made with the following U.S. Geological Survey Quadrangle: 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
- 18657, 12th edition, Nov. 24, 1984, scale 1:10,000
- 18654, 33rd edition, Jan. 26, 1985, scale 1:40,000
- 18656, 46th edition, Jan. 19, 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

*Jerry O. Robson*

Chief, Photogrammetric Production Sec.

*A. Y. Bryan*

Chief, Photogrammetry Branch

### RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. CM-8305, TP-01247

## 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.

[illegible]