TP-00536

TP-00536

NOAA FORM 76-35

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEY

DESCRIPTIVE REPORT

Type of Survey ....Shoreline.....

Job No. ..CM-7704..... *Map No.* TP-00536....

Classification No. Class III (FINAL) *Edition No.* .....1.....

This map edition will not be field edit

LOCALITY

State .....California.....

General Locality San Francisco & San Pablo Bays

Locality ...Redwood Creek.....

.....

1977 TO 19

REGISTRY IN ARCHIVES

DATE .....

☆ U.S. GOVERNMENT PRINTING OFFICE: 1974-762-901

NOAA FORM 76-36A (3-72)

U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.

DESCRIPTIVE REPORT - DATA RECORD

TYPE OF SURVEY
- [X] ORIGINAL
- [ ] RESURVEY
- [ ] REVISED

SURVEY TP-00536
MAP EDITION NO. 1
MAP CLASS III, FINAL
JOB PH-CM-7704

PHOTOGRAMMETRIC OFFICE
Coastal Mapping Division, Norfolk, Va.

OFFICER-IN-CHARGE
Roy K. Matsushige, CDR.

LAST PRECEEDING MAP EDITION
TYPE OF SURVEY
- [ ] ORIGINAL
- [ ] RESURVEY
- [ ] REVISED

JOB PH-
MAP CLASS
SURVEY DATES:
19__ TO 19__

I. INSTRUCTIONS DATED

1. OFFICE		2. FIELD	
Aerotriangulation	April 13, 1977	Control-Premarking	Feb. 7, 1977
Compilation	Aug. 3, 1977		
Amendment I	April 20, 1978		
Amendment II	April 6, 1979		
Compilation (Memo)	July 2, 1981		
Compilation Amendment III	July 30, 1979		

II. DATUMS

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

2. VERTICAL: [X] MEAN HIGH-WATER [X] MEAN LOW-WATER [X] MEAN LOWER LOW-WATER [ ] MEAN SEA LEVEL — OTHER (Specify)

3. MAP PROJECTION: Lambert Conformal

4. GRID(S): STATE CA. ZONE 3; STATE ZONE

5. SCALE 1:10,000

III. HISTORY OF OFFICE OPERATIONS

OPERATIONS		NAME	DATE
1. AEROTRIANGULATION METHOD: Analytic	BY	R. Kelly	July 1977
	LANDMARKS AND AIDS BY		
2. CONTROL AND BRIDGE POINTS METHOD: Coradomat	PLOTTED BY	S. Solbeck	July 1977
	CHECKED BY		
3. STEREOSCOPIC INSTRUMENT COMPILATION INSTRUMENT: Wild B-8 SCALE: 1:15,000	PLANIMETRY BY	I. Perkinson	Dec 1978
	CHECKED BY	R. Kravitz	Dec 1978
	CONTOURS BY	N.A	
	CHECKED BY	N.A.	
4. MANUSCRIPT DELINEATION METHOD: Graphic, smooth drafted SCALE: 1:10,000	PLANIMETRY BY	I. Perkinson	Mar. 1979
	CHECKED BY	L. Neterer Jr.	July 1979
	CONTOURS BY	N.A..	
	CHECKED BY	N.A.	
	HYDRO SUPPORT DATA BY	I. Perkinson	Mar. 1979
	CHECKED BY	L. Neterer Jr.	July 1979
5. OFFICE INSPECTION PRIOR TO FIELD EDIT	BY	L. Neterer Jr.	July 1979
6. APPLICATION OF FIELD EDIT DATA	BY	None	
	CHECKED BY		
7. COMPILATION SECTION REVIEW	BY	L. Neterer Jr.	July 1979
8. FINAL REVIEW	BY	J. Hancock	Aug. 1981
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH	BY	J. Hancock	Aug. 1981
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH	BY	G. Fromm	Sept. 1981
11. MAP REGISTERED - COASTAL SURVEY SECTION	BY	H. D. Wolfe	MAR 1982

Chief, Photo Map and Imagery Section
Photogrammetry Division

NOAA FORM 76-36B
(3-72)

U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEY

COMPILATION SOURCES

TP-00536

1. COMPILATION PHOTOGRAPHY

CAMERA(S): Wild RC-10(B) B=152.74MM.)

TIDE STAGE REFERENCE
- [ ] PREDICTED TIDES
- [X] REFERENCE STATION RECORDS
- [X] TIDE CONTROLLED PHOTOGRAPHY

TYPES OF PHOTOGRAPHY LEGEND
(C) COLOR
(P) PANCHROMATIC
(I) INFRARED B&W

TIME REFERENCE
ZONE: Pacific
MERIDIAN: 120th
- [X] STANDARD
- [ ] DAYLIGHT

NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE
77B(P) 2513-2516 *	Mar 4, 1977	10:30	1:30,000	Not computed
77B(P) 2502-2504 *	"	10:18	"	"
77B(P) 3745-3748 **	Mar 18, 1977	14:23	"	"
77B(I) 3884 & 3886	Mar 29, 1977	13:25	"	+.05 feet MLLW
77B(I) 3875 & 3877	"	13:12	"	+.20 feet MLLW
77B(I) 2852 & 2854	Mar 5, 1977	11:07	"	-.03 feet MHW
77B(I) 2845 & 2847	"	10:56	"	-.17 feet MHW
77B(I) 3868 & 3870	Mar 28, 1977	15:16	"	+.08 feet MLW

REMARKS * Compilation photography; ** Hydro support photography
Infrared photography (MLW, MLLW & MHW) was ratioed to 1:10,000 scale.

2. SOURCE OF MEAN HIGH-WATER LINE: (MHW)

The mean high water line was compiled graphically using ratio prints of the appropriate tide-coordinated black-and-white infrared photographs listed above under Item I.

3. SOURCE OF MEAN LOW-WATER ~~OR~~ AND MEAN LOWER LOW-WATER LINE: (MLW MLLW)

The mean low water and the mean low water lines were compiled using the ratio prints of the appropriate tide-coordinated black-and-white infrared photographs listed above under Item 1. Refer paragraph #36 of the Compilation Report bound with this Descriptive Report.

4. CONTEMPORARY HYDROGRAPHIC SURVEYS *(List only those surveys that are sources for photogrammetric survey information.)*

SURVEY NUMBER	DATE(S)	SURVEY COPY USED	SURVEY NUMBER	DATE(S)	SURVEY COPY USED

5. FINAL JUNCTIONS

NORTH	EAST	SOUTH	WEST
TP-00534 & TP-00535	TP-00537	TP-00537	No survey

REMARKS
This 1:10,000 inset map is enclosed and junctions with three 1:20,000 scale maps: TP-00534, TP-00535 and TP-00537

NOAA FORM 76-36B
(3-72)

NOAA FORM 76-36C
(3-72)

U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEY

TP-00536

HISTORY OF FIELD OPERATIONS

I. [X] FIELD INSPECTION OPERATION (Premarking) [ ] FIELD EDIT OPERATION

OPERATION		NAME	DATE
1. CHIEF OF FIELD PARTY		R. Melby	Feb. 1977
2. HORIZONTAL CONTROL	RECOVERED BY	None	
	ESTABLISHED BY		
	PRE-MARKED OR IDENTIFIED BY		
3. VERTICAL CONTROL	RECOVERED BY	None	
	ESTABLISHED BY		
	PRE-MARKED OR IDENTIFIED BY		
4. LANDMARKS AND AIDS TO NAVIGATION	RECOVERED *(Triangulation Stations)* BY	None	
	LOCATED *(Field Methods)* BY		
	IDENTIFIED BY		
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION [ ] COMPLETE [ ] SPECIFIC NAMES ONLY [X] NO INVESTIGATION BY		
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY		
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY		

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED

None

PHOTO NUMBER	STATION NAME

2. VERTICAL CONTROL IDENTIFIED

PHOTO NUMBER	STATION DESIGNATION

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 [X] 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)*

Field Report

NOAA FORM 76-36C
(3-72)

*U.S. GOVERNMENT PRINTING OFFICE: 1974 - 768-078

NOAA FORM 76-36D
(3-72)

U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

RECORD OF SURVEY USE

TP-00536

I. MANUSCRIPT COPIES

COMPILATION STAGES			DATE MANUSCRIPT FORWARDED	
DATA COMPILED	DATE	REMARKS	MARINE CHARTS	HYDRO SUPPORT
Compilation complete pending field edit	July 1979	Class III Manuscript	July 20, 1979	
Final Review, Class III	Aug. 1981	Final Class III Map, Field edit canceled	DECEMBER ~~Aug.~~ ~~5~~, 1981	

II. LANDMARKS AND AIDS TO NAVIGATION

1. REPORTS TO MARINE CHART DIVISION, NAUTICAL DATA BRANCH

NUMBER	CHART LETTER NUMBER ASSIGNED	DATE FORWARDED	REMARKS

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

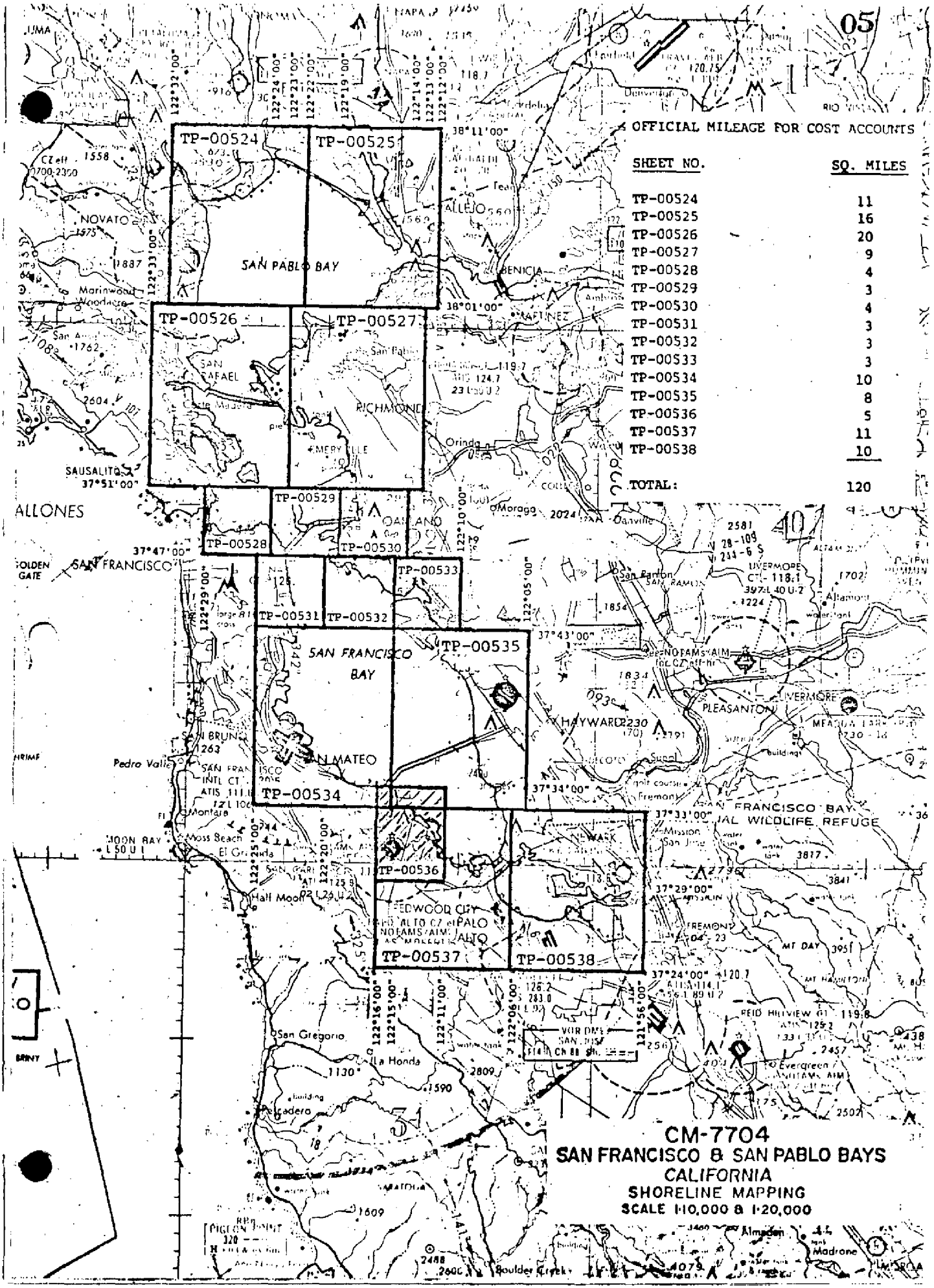
III. FEDERAL RECORDS CENTER DATA

1. [X] BRIDGING PHOTOGRAPHS; [X] DUPLICATE BRIDGING REPORT; [X] COMPUTER READOUTS.
2. [X] CONTROL STATION IDENTIFICATION CARDS; [ ] FORM NOS 567 SUBMITTED BY FIELD PARTIES.
3. [X] SOURCE DATA *(except for Geographic Names Report)* AS LISTED IN SECTION II, NOAA FORM 76-36C.
   ACCOUNT FOR EXCEPTIONS:
   Federal Record Center data for this map will be held by Photogrammetry Division and not forwarded until completion of all CM-7704 maps. Maps will be registered as received.
4. [ ] DATA TO FEDERAL RECORDS CENTER. DATE FORWARDED: 12/8/81

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

	SURVEY NUMBER	JOB NUMBER	TYPE OF SURVEY / MAP CLASS
SECOND EDITION	TP - _____ (2)	PH - _____	[ ] REVISED [ ] RESURVEY
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	[ ] II. [ ] III. [ ] IV. [ ] V. [ ] FINAL
THIRD EDITION	TP - _____ (3)	PH- _____	[ ] REVISED [ ] RESURVEY
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	[ ] II. [ ] III. [ ] IV. [ ] V. [ ] FINAL
FOURTH EDITION	TP - _____ (4)	PH - _____	[ ] REVISED [ ] RESURVEY
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	[ ] II. [ ] III. [ ] IV. [ ] V. [ ] FINAL

☆U.S. Government Printing Office: 1975 – 665-661/1108, Region No. 6



OFFICIAL MILEAGE FOR COST ACCOUNTS

SHEET NO.	SQ. MILES
TP-00524	11
TP-00525	16
TP-00526	20
TP-00527	9
TP-00528	4
TP-00529	3
TP-00530	4
TP-00531	3
TP-00532	3
TP-00533	3
TP-00534	10
TP-00535	8
TP-00536	5
TP-00537	11
TP-00538	10
TOTAL:	120

SUMMARY TO ACCOMPANY
DESCRIPTIVE REPORTS

TP-00536

This 1:10,000 shoreline manuscript is one of fifteen maps, TP-00524 thru TP-00538 that comprise project CM-7704, San Francisco and San Pablo Bays, California. This project consist of eight 1:20,000 maps, six 1:10,000 maps featuring San Francisco Bay entrance and one 1:10,000 inset map of the Redwood Creek area.

The initial purpose of this project was to provide data in support of hydrographic operations beginning in the Fall of 1978. However, due to rapid cultural coast development, field activity has been temporarily delayed. Photogrammmetry memo/instruction dated July 2, 1981 has reassigned this project, in its present stage, for final review and registration. Registration will include 10 Final Maps and 5 Final Class III Maps. Immediately afterward, a Revision Survey using 1981 photography is scheduled to facilitate hydrography and to provide Nautical Charts with current shoreline information.

This Final Class III Map, of which field edit has not been accomplished, is the 1:10,000 inset map of Redwood Creek that incorporates portions of three 1:20,000 scale maps; TP-00534, TP-00535 and TP-00537.

Field work prior to compilation was accomplished in March 1977; this involved the establishment of horizontal control in order to meet aerotriangulation requirements. During this period, ground support was provided for obtaining tide-coordinated photography and several of the project's navigational aids and landmarks for Charts were field determined.

Photo coverage was provided in March 1977 for aerotriangulation and compilation using panchromatic film with the "B" camera at 1:50,000 and 1:30,000 scales. Hydro support photography was taken using panchromatic film with the "B" camera at 1:30,000 scale. Tide coordinated black and white infrared photography at MHW and MLLW was supplied using the "B" camera at 1:40,000 and 1:30,000 scales. An additional flight strip flown at MLW was also provided at 1:30,000 scale for TP-00536 in compliance with the special request by the California Department of Justice.

Analytic aerotriangulation was adequately provided by the Washington Science Center in July 1977.

Compilation was performed at the Atlantic Marine Center in July 1979. The Class III manuscript was forwarded to PMC for the combined field edit and hydrographic operations. However, these functions have been temporarily canceled due to active cultural and shoreline changes that have developed since the 1977 photography. It is anticipated that current data will be furnished to the hydrographer and Nautical Charts through the 1981 Revision Survey.

Final review for this Final Class III Map was performed at the Atlantic Marine Center in August 1981. At this time, several apparent discrepancies were discovered; consequently, instrument recompilation of the 1977 photography and a comprehensive office review was performed to assure an accurate and complete photogrammetric map.

The original base manuscript and all pertinent data was forwarded to the Washington Science Center for final registration and preparation for the 1981 Revision Survey.

FIELD INSPECTION

TP-00536

There was no field inspection prior to compilation. Field work accomplished was limited to the premarking and establishment of the horizontal control necessary for the aerotriangulation of the project.

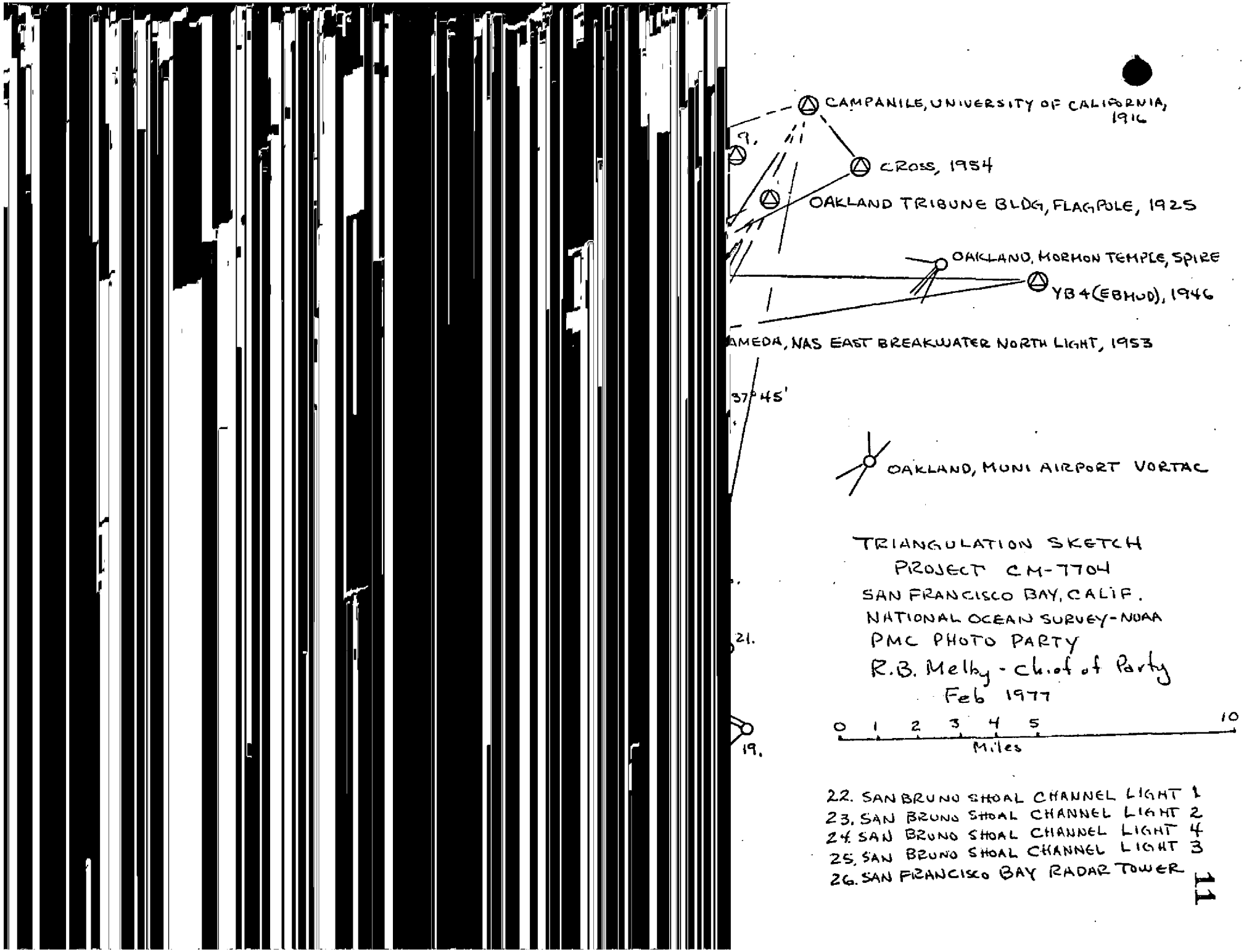
The coordinator would transmit time checks and receive tide staff readings of involved stations and filter and transmit to the aircraft the flight lines that were within the required tide ranges and maintain a summary of staff readings.

Because of the elevation of the coordination site a Motorola Walkie-Talkie was sufficient to maintain communications to all sites and the aircraft.

The operation was rather smooth as all observers were on station at the required time and no radio or transportation failures were experienced at the required times. The only difficulty encountered was an erratic tidal behavior during one series of projected favorable tides when during an unusual high pressure atmospheric condition the predicted tide range decreased by about 0.7 foot, causing stations to go out of range and greatly altering the tidal pattern.

Recommendations:

It is recommended that the field data, tidal predictions, etc., be furnished to the field units, with ample advance time to allow a thorough research and planning of the field phases of the project.


CAMPANILE, UNIVERSITY OF CALIFORNIA, 1916
CROSS, 1954
OAKLAND TRIBUNE BLDG, FLAGPOLE, 1925
OAKLAND, MORMON TEMPLE, SPIRE
YB 4 (EBMUD), 1946
AMEDA, NAS EAST BREAKWATER NORTH LIGHT, 1953
37° 45'
OAKLAND, MUNI AIRPORT VORTAC
9.
21.
19.
TRIANGULATION SKETCH
PROJECT CM-7704
SAN FRANCISCO BAY, CALIF.
NATIONAL OCEAN SURVEY-NOAA
PMC PHOTO PARTY
R.B. Melby - Chief of Party
Feb 1977
0 1 2 3 4 5 10
Miles
22. SAN BRUNO SHOAL CHANNEL LIGHT 1
23. SAN BRUNO SHOAL CHANNEL LIGHT 2
24. SAN BRUNO SHOAL CHANNEL LIGHT 4
25. SAN BRUNO SHOAL CHANNEL LIGHT 3
26. SAN FRANCISCO BAY RADAR TOWER

PHOTOGRAMMETRIC PLOT REPORT
SAN FRANCISCO & SAN PABLO BAYS
CALIFORNIA

Job CM-7704

July 22, 1977

21. Area Covered

This report covers eight 1:20,000 sheets, TP-00524, TP-00525, TP-00526, TP-00527, TP-00534, TP-00535, TP-00537, TP-00538, and seven 1:10,000 sheets TP-00528, TP-00529, TP-00530, TP-00531, TP-00532, TP-00533, and TP-00536 of San Francisco Bay and San Pablo Bay, California

22. Method

Seven strips of 1:50,000 scale panchromatic photography, taken with the "B" camera were bridged by analytic aero-triangulation methods and adjusted to ground on the California Zone 3. Common pass points were positioned between the 1:50,000 scale and 1:30,000 scale panchromatic photography, also taken with the "B" camera to provide horizontal control for compilation of the 1:10,000 and 1:20,000 scale maps.

Tide-coordinated supplemental photography, 1:30,000 and 1:40,000 scale MHW and MLLW were tied to the 1:50,000 scale bridging photography for shoreline compilation of 1:10,000 and 1:20,000 scale maps by means of positioning common points for ratio prints.

The 1:30,000 scale hydro support photography was also tied to 1:50,000 scale bridging photography by common points to determine the exact ratios. Tie points were used to augment datum between bridging strips. After running a strip adjustment on strip 5, it was found, for no apparent reason, that the control and tie points did not fit. This was resolved by running a block adjustment. Ruling of manuscripts and plotting of points was done on the Coradomat. A list was forwarded with this job, CM-7704, to AMC for

24. Supplemental Data

Local shoreline and USGS quadrangles were used to provide elevations for vertical adjustments of bridges.

25. Photography

The photography was adequate as to placement of flight lines consistent quality, definition and absence of haze.

Submitted by:

Robert B. Kelly

Robert B. Kelly

Approved and Forwarded:

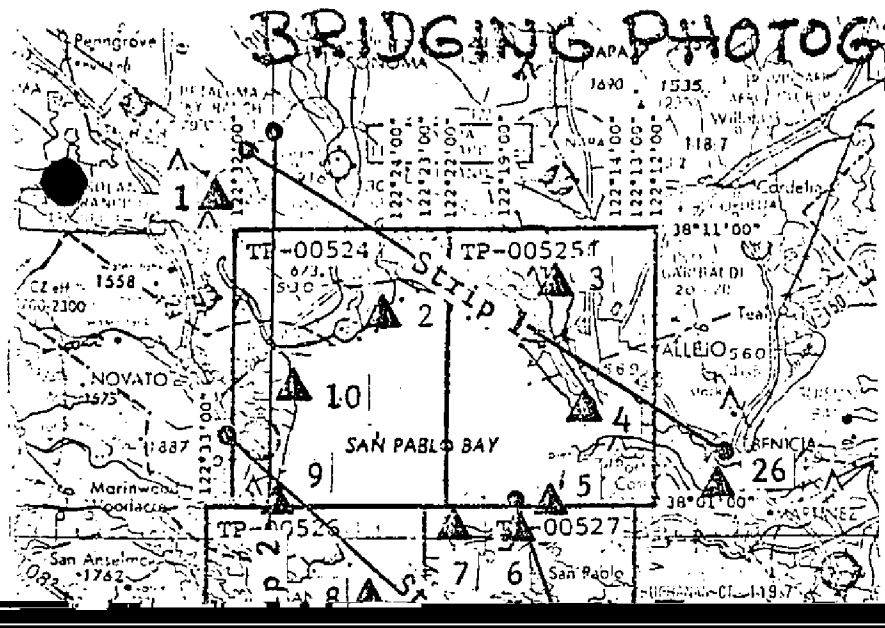
John D. Perrow Jr

John D. Perrow, Jr
Chief, Aerotriangulation Section

KEY TO NUMBERED CONTROL
STATIONS USED IN ADJUSTMENT
AND CLOSURES

1	LAKEVILLE, SQUARE TANK ON HILL, 1951	TANK(1.04,-3.77) PANEL(-.25, .23)
2	BUG (SLC), 1951 COULD NOT SEE	
3	SLAUGHTERHOUSE PT. 3, 1921	(-2.22, .52)
4	MARE ISLAND SOUTHEAST= ,1952	(3.02,-.23)
5	PINOLE HERCULES POWDER CO.,TANK ,1947	(.38,-.17)
6	WILSON, 1852	(.08,-.10)
7	POINT PINOLE ATLAS DOCK, SHED E. GABLE, 1950	COULD NOT SEE
8	SAN PABLO RIDGE, 1897	(2.14,-1.21)
9	GROVE POINT 2, 1887	(-.65, .49)
10	PETALUMA CREEK, 1851	(1.70,- .24)
11	RICHARD, 1932	(-2.08, .91)
12	ALAMRDA N.A.S. E. BREAKWATER N. LT. 1953	(.00, .00)
13	CROSSING, 1955	(-.09,- .42)
14	T I C9, 1947	(.00, .00)
15	CLARK, 1948	(.45, .74)
16	BARRY, 1932	(-3.36,-.98)
17	SAN BRUNO MTN. (RADIO STA. KNBC MAST), 1899	(.03, .49)
18	POINT SAN BRUNO, 1925	(.04,- .19)
19	GUANO ISLAND, 1851	(3.33 ,-1.50)
20	DUM, 1930	(-1.31, 1.01)
21	RED HILL, 1851	(- .05, .01)
22	SAN, 1947	(.27, .20)
23	BENCH MARK H 111, 1932 DID NOT FIT ADJUSTMENT	
24	COFFIN 2, 1974	(.07,- .02)
25	BALD PRAK (EBMUD),1946	(- .15, .02)
26	BUCK, 1949	(-1.04,- .52)
27	MANZANITA (CADH), 1972	(-1.01,-1.09)

BRIDGING PHOTOGRAPHY

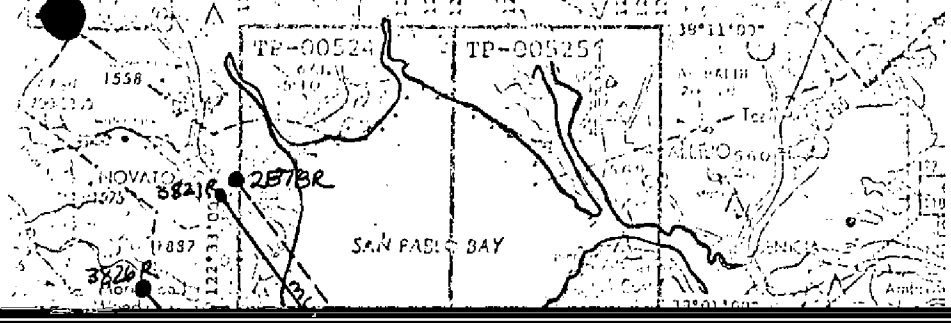


INDEX TO PHOTOGRAPHS

STRIP 1	77B	2577 - 2586
" 2	"	2629 - 2640
" 3	"	2565 - 2573
" 4	"	2598 - 2604
" 5	"	2644 - 2661
" 6	"	2619 - 2625

HIGH & LOW WATER INFRARED PHOTOGRAPHY

1:40,000 NLLW ——
MHW - - -



OFFICIAL MILEAGE FOR COST ACCOUNTS

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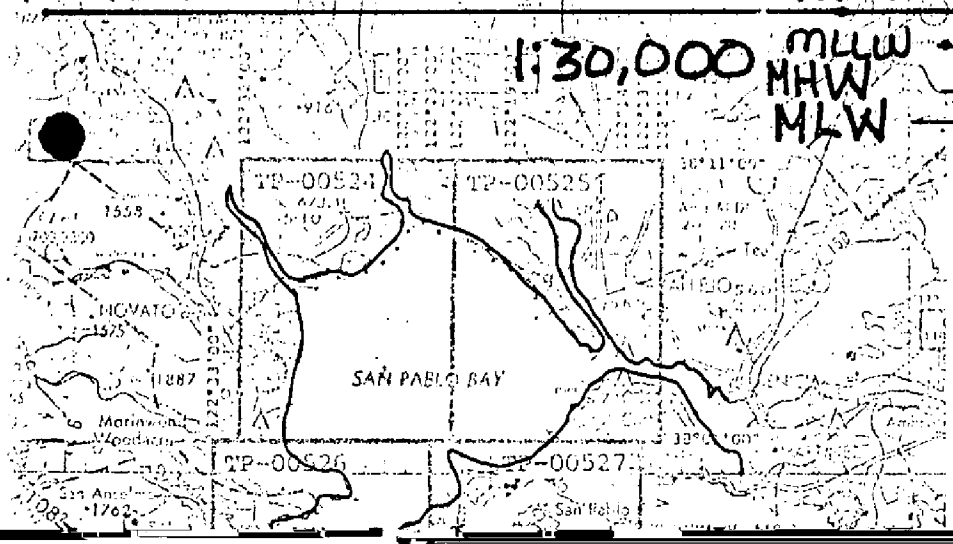
TP-00524	11
TP-00525	16
TP-00526	20
TP-00527	9
TP-00528	4
TP-00529	3
TP-00530	4

HIGH & LOW WATER INFRARED PHOTOGRAPHY

1:30,000 MLLW MHW MLW



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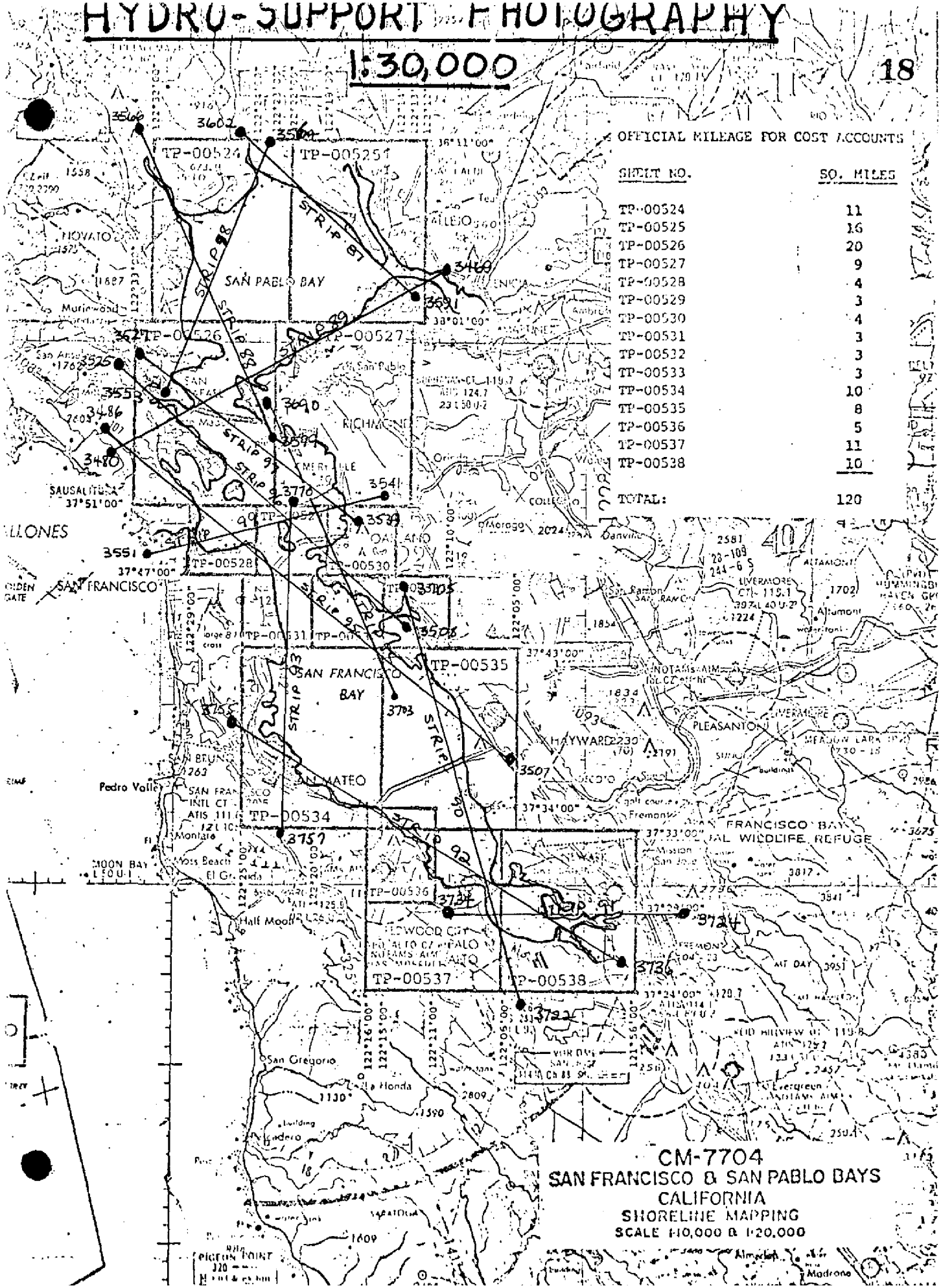
TP-00531	3
TP-00532	3
TP-00533	3

HYDRO-SUPPORT PHOTOGRAPHY

1:30,000



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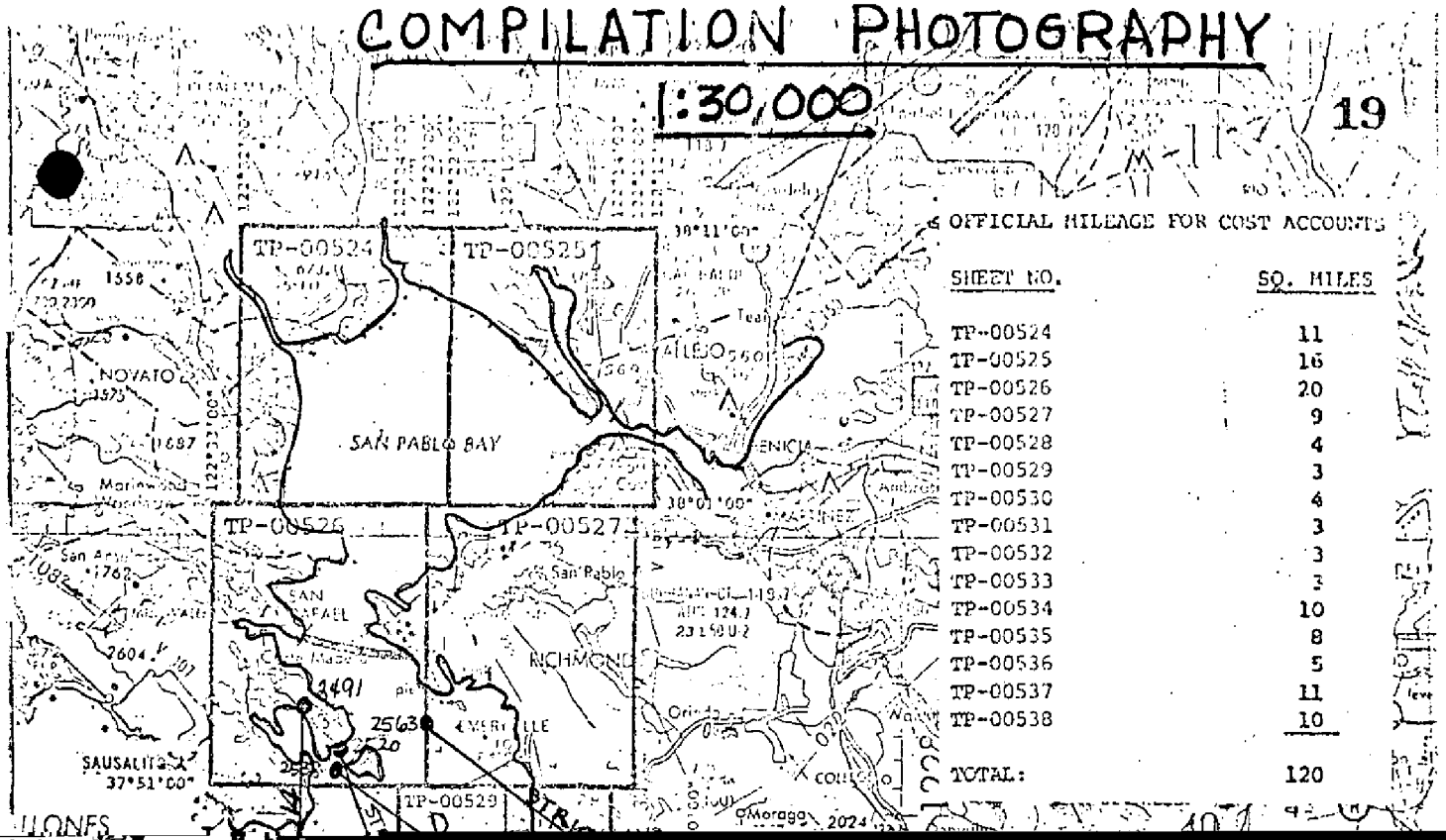
TP-00531	3
TP-00532	3
TP-00533	3
TP-00534	10
TP-00535	8
TP-00536	5
TP-00537	11
TP-00538	10
TOTAL:	120

COMPILATION PHOTOGRAPHY

1:30,000



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TP-00530	4
TP-00531	3
TP-00532	3
TP-00533	3
TP-00534	10
TP-00535	8
TP-00536	5
TP-00537	11
TP-00538	10
TOTAL:	120

NOAA FORM 76-41
(6-75)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

DESCRIPTIVE REPORT CONTROL RECORD

MAP NO.	JOB NO.	GEODETIC DATUM	ORIGINATING ACTIVITY
TP-00536	CM-7704	N. A. 1927	Coastal Mapping Div., AMC

STATION NAME	SOURCE OF INFORMATION (Index)	AEROTRI-ANGULATION POINT NUMBER	COORDINATES IN FEET STATE California ZONE 3	GEOGRAPHIC POSITION φ LATITUDE λ LONGITUDE	REMARKS
* Transmission Tower No. 8, 1931	371221		x=	φ 37° 33' 02.830"	87.2 1762.5
	3061	311	y=	λ 122° 15' 00.157"	03.9 1469.0
* Transmission Tower No. 7, 1931	"		x=	φ 37° 32' 57.568"	1774.8 75.0
	2084		y=	λ 122° 14' 50.830"	1247.7 225.1
K. P. O. Commercial Radio Station, East Tower, 1934	"		x=	φ 37° 32' 50.434"	1554.8 294.9
	2049	312	y=	λ 122° 13' 54.368"	1334.6 138.2
Radio Station K. N. B. C. Tall Mast, 1955	"		x=	φ 37° 32' 49.793"	1535.1 314.7
	2044		y=	λ 122° 13' 58.002"	1423.8 49.0
* Transmission Tower No. 9, 1931	"		x=	φ 37° 32' 15.394"	474.6 1375.2
	2085		y=	λ 122° 13' 35.933"	882.2 590.8
Windmill On Tank, 1931	"		x= Appears destroyed	φ 37° 32' 13.606"	419.5 1430.3
	2089		y= on photography	λ 122° 13' 33.205"	815.2 657.8
Windmill, 1931	"		x= Appears destroyed	φ 37° 31' 57.071"	1759.4 90.3
	2094		y= on photography	λ 122° 14' 34.537"	848.0 625.2
Marsh, 1925	"		x=	φ 37° 32' 04.661"	143.7 1706.0
	2020	315	y=	λ 122° 11' 42.707"	1048.5 424.6
* Redwood Creek, North Side Transmission Tower, 1931	"		x= Not on Photography	φ 37° 31' 28.371"	874.6 975.1
	2063	316	y= at this location	λ 122° 12' 12.412"	304.8 1168.5
* Redwood Creek, South Side Transmission Tower, 1931	"		x= Not on Photography	φ 37° 31' 22.449"	692.1 1157.7
	2062	317	y= at this location	λ 122° 12' 02.006"	49.3 1424.1

COMPUTED BY Lowell O. Neterer, Jr.	DATE 9/20/77	COMPUTATION CHECKED BY J. Moler	DATE 9/20/77
LISTED BY A. C. Rauck, Jr.	DATE 5/18/77	LISTING CHECKED BY F. Margiotta	DATE
HAND PLOTTING BY	DATE	HAND PLOTTING CHECKED BY F. Mauldin	DATE Oct. 27, 1978

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

NOAA FORM 76-41
(6-75)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

DESCRIPTIVE REPORT CONTROL RECORD

MAP NO.	JOB NO.	GEODETIC DATUM	ORIGINATING ACTIVITY
TP-00536	CM-7704	N. A. 1927	Coastal Mapping Div., AMC

STATION NAME	SOURCE OF INFORMATION (Index)	AEROTRI-ANGULATION POINT NUMBER	COORDINATES IN FEET STATE California ZONE 3	GEOGRAPHIC POSITION φ LATITUDE λ LONGITUDE	REMARKS Front M. Back M.
Redwood City, Cement Works East Stack, 1925	371221 2058		x= Appears destroyed y= on photography	φ 37° 30' 58.489" λ 122° 12' 13.751"	1803.2 46.6 337.7 1135.8
Cement Plant, Square Bin, 1931	" 2059		x= Appears destroyed y= on photography	φ 37° 31' 00.88" λ 122° 12' 14.53"	27.1 1822.6 356.8 1116.7
Wooden Windmill Vertical Vane, 1931	" 2088		x= Appears destroyed y= on photography	φ 37° 31' 04.239" λ 122° 11' 28.342"	130.7 1719.1 696.0 1777.5
Redwood City, Courthouse Dome, 1931	371222 1106	295	x= y=	φ 37° 29' 13.40" λ 122° 13' 42.86"	413.1 1436.6 1053.0 421.1
Redwood City, Franks Tannery Stack, 1925	" 1107		x= Appears destroyed y= on photography	φ 37° 29' 31.110" λ 122° 13' 25.484"	959.1 890.6 626.0 847.9
Redwood City Tank, 1931	" 1129	296	x= Appears destroyed y= on photography	φ 37° 29' 30.45" λ 122° 13' 25.48"	938.7 911.0 625.9 848.0
K. P. O. Commercial Radio Station, West Tower, 1934	" 2050		x= Appears destroyed y= on photography	φ 37° 32' 49.047" λ 122° 14' 01.584"	1512.1 337.7 38.9 1434.4
			x= y=	φ λ	
*See Review Report item #65 concerning these towers			x= y=	φ λ	
			x= y=	φ λ	

COMPUTED BY Lowell O. Neterer, Jr.	DATE 9/20/77	COMPUTATION CHECKED BY J. Moler	DATE 9/20/77
LISTED BY A. C. Rauck, Jr.	DATE 5/18/77	LISTING CHECKED BY F. Margiotta	DATE 8/19/77
HAND PLOTTING BY	DATE	HAND PLOTTING CHECKED BY F. Mauldin	DATE Oct. 27, 1978

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

COMPILATION REPORT

TP-00536

31. DELINEATION

Delineation was by instrument methods using the Wild B-8 stereoplotter. Compilation photography was adequate. The mean high water, mean low water and mean lower low water lines were compiled graphically from the tide coordinated infrared ratio photos indicated on form 76-36B.

32. CONTROL

Horizontal control was adequate. Refer to the Photogrammetric Plot Report, dated July 22, 1977.

33. SUPPLEMENTAL DATA

None

34. CONTOURS AND DRAINAGE

Contours are not applicable to this project. See item #31.

35. SHORELINE AND ALONGSHORE DETAILS

See item #31.

36. OFFSHORE DETAILS

In addition to the graphic compilation of the mean high water line and the mean lower low water line, the mean low water line was also delineated in the vicinity of Bird and Greco Islands. This was requested by the Department of Justice, State of California per their letter dated January 28, 1977 and the office project instructions.

37. LANDMARKS AND AIDS

Preliminary 76-40 forms consisting of three pages of Navigational Aids and one page of Landmarks for charts were prepared for field edit.

38. CONTROL FOR FUTURE SURVEYS

None

39. JUNCTIONS

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

40. HORIZONTAL AND VERTICAL ACCURACY

See item #32.

46. COMPARISON WITH EXISTING MAPS

A comparison was made with the following U.S.G.S. Quardrangles: Redwood Point, CA; 1:24,000 scale; 1959 photo revised 1968/1973 and San Mateo, CA; 1:24,000 scale; 1956 photo revised 1968/1973.

47. COMPARISON WITH NAUTICAL CHARTS

A comparison was made with the following National Ocean Survey chart: No. 18652, 1:40,000 scale, 16th Ed., March 26,1977.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

None

ITEMS TO BE CARRIED FORWARD

None

Submitted by:

Irene Perkinson

Irene Perkinson
Cartographer
Date: March 30, 1979

Approved:

Billy H. Barnes

for Albert C. Rauck, Jr.
Chief, Coastal Mapping Section

PHOTOGRAMMETRIC OFFICE PRE-HYDRO AND FIELD EDIT REVIEW

TP- 00536

PROJECTION AND GRIDS L. O. N.	TITLE L. O. N.	HORIZONTAL CONTROL L. O. N.	PHOTOGRAMMETRIC PLOT REPORT L. O. N.
DETAIL POINTS AND PASS POINTS L. O. N.	PROCESSED RATIOS L. O. N.	AIDS TO NAVIGATION L. O. N.	LANDMARKS L. O. N.
MEAN HIGH WATER LINE L. O. N.	LOW-WATER LINE L. O. N.	ROCKS, SHOALS, ETC. L. O. N.	ALONG SHORE AND OTHER PHYSICAL FEATURES L. O. N.
WATER FEATURES L. O. N.	ALONG SHORE AND OTHER CULTURAL FEATURES L. O. N.	BRIDGES L. O. N.	ROADS L. O. N.
BUILDINGS L. O. N.	RAILROADS None.	CONTOURS AND SPOT ELEVATIONS NA	GEOGRAPHIC NAMES L. O. N.
JUNCTIONS L. O. N.	LEGIBILITY OF THE MANUSCRIPT L. O. N.	COMPILATION REPORT L. O. N.	FIELD EDIT OZALID L. O. N.
COMPARISON WITH NAUTICAL CHARTS L. O. N.	COMPARISON WITH PRIOR SURVEYS NA	COMPARISON WITH EXISTING MAPS L. O. N.	FIELD PRINTS AND OTHER COPIES L. O. N.
REVIEWER L. O. Neterer, Jr.	DATE July 1979	SUPERVISOR A. C. Rauck, Jr.	DATE July 1979

REMARKS

PHOTOGRAMMETRIC OFFICE POST-HYDRO AND FIELD EDIT REVIEW

MANUSCRIPT NUMBERS	FORMAT STICK-UP	MANUSCRIPT SIZE	HORIZONTAL CONTROL
PHOTO HYDRO STATIONS	PLOTTING OF SEXTANT FIXES	AIDS TO NAVIGATION	LANDMARKS
MEAN HIGH WATER LINE	LOW-WATER LINE	ROCKS, SHOALS, ETC.	ALONG SHORE AND OTHER PHYSICAL FEATURES
WATER FEATURES	ALONG SHORE AND OTHER CULTURAL FEATURES	PIPELINES, CABLES, ETC.	BRIDGES
ROADS	BUILDINGS	RAILROADS	CONTOURS AND SPOT ELEVATIONS
GEOGRAPHIC NAMES	JUNCTIONS	FIELD EDIT PHOTOGRAPHS	FIELD EDIT OZALID
GEOGRAPHIC FIX POSITIONS	FIELD FORMS	FIELD EDIT REPORT	APPROVED TIDES
CHART MAINTENANCE PRINT AND OTHER COPIES	PREPARATION FOR FINAL REVIEW	COMPILER	DATE
REVIEWER	DATE	SUPERVISOR	DATE

REMARKS

Class III, No field edit accomplished.

REVIEW REPORT TP-00536

SHORELINE

61. GENERAL STATEMENT:

An extensive final review was performed in order to meet map accuracy requirements for this Final Class III Map. See the Summary included in this Descriptive Report.

In compliance to the California Department of Justice request, see letter dated January 28, 1977, the mean low water line was compiled along the outer shoreline for this map.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS:

Not applicable

63. COMPARISON WITH MAPS OF OTHER AGENCIES:

A comparison was made with the following U.S.G.S. quadrangles: Redwood Point, CA; 1:24,000 scale; 1959, photo revised 1968 and 1973; and San Mateo, CA; 1:24,000 scale; 1956, photo revised 1968 and 1973. No significant differences were noted.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:

The intended contemporary hydrographic survey has been temporarily postponed pending the assigned 1981 Revision Survey of this Class III Map. See the Summary included in this Descriptive Report.

65. COMPARISON WITH NAUTICAL CHARTS:

A comparison was made with N. O. S. chart 18651, 31st edition, July 12/80, 1:40,000 scale and chart 18652, 20th edition, April 16/81, 1:40,000 / 1:80,000 scale.

Five of the six charted Landmark Towers extending from Redwood Creek to Belmont Slough are 1931 triangulation stations. Even though they were recovered in 1976, it is very likely they have been rebuilt. The two charted Towers crossing Redwood Creek apparently have been razed and rebuilt as both positions differ by approx. 80 ft. The two charted Towers crossing Steinberger Slough and the two charted Towers crossing Belmont Slough are possibly the original towers as their photo positions check reasonably well; however, definite verification will require a field investigation. Also these charted landmark towers are not the "tallest" as indicated by their descriptive name. In all cases, the tallest tower appears to be the most northerly tower of three.

TP-00536

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS:

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

A Revision Survey is scheduled immediately after final review and registration of this map. Refer to Photogrammetry memo/instruction dated July 2, 1981.

Submitted by:

Jerry L. Hancock
Final Reviewer

Approved for Forwarding:

Billy H. Barnes

Chief, Photogrammetric Branch, AMC

Approved:

August 3, 1981

27

GEOGRAPHIC NAMES

FINAL NAME SHEET

CM-7704 (San Francisco and San Pablo Bays, California)

TP-00536

Bair Island

Bay Slough

Belmont Channel

Belmont Slough

Bird Island

Brewer Island

Corkscrew Slough

Deepwater Slough

First Slough

Foster City

Greco Island

Phelps Slough

Port of Redwood City

Pulgas Creek

Redwood City

Redwood Creek

Redwood Point

San Francisco Bay

Smith Slough

Southern Pacific (RR)

Steinberger Slough

Westpoint Slough

Approved by:

Charles E. Harrington

Charles E. Harrington
Chief Geographer, OA/C3x5

Bill

Copies of pages 28 thru 31 have been sent to the Coast Guard (12th Dist) C.G Hdqs.

4/28/82
DK

NOAA FORM 76-40 (8-74)

Replaces C&GS Form 567.

NONFLOATING AIDS

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

FOR CHARTS

ORIGINATING ACTIVITY
- [ ] HYDROGRAPHIC PARTY
- [ ] GEODETIC PARTY
- [ ] PHOTO FIELD PARTY
- [X] COMPILATION ACTIVITY
- [X] FINAL REVIEWER
- [ ] QUALITY CONTROL & REVIEW GRP.
- [ ] COAST PILOT BRANCH

(See reverse for responsible personnel)

[X] TO BE CHARTED [ ] TO BE REVISED [ ] TO BE DELETED	REPORTING UNIT (Field Party, Ship or Office)	STATE	LOCALITY	DATE
	Coastal Mapping Div. A.M.C. Norfolk, VA	California	San Francisco and San Pablo Bays	7/20/79 7/29/81

The following objects HAVE [ ] HAVE NOT [X] been inspected from seaward to determine their value as landmarks.

OPR PROJECT NO.	JOB NUMBER	SURVEY NUMBER	DATUM
	CM-7704	TP-00536	N.A. 1927

CHARTING NAME	DESCRIPTION (Record reason for deletion of landmark or aid to navigation. Show triangulation station names, where applicable, in parentheses)	POSITION LATITUDE ° ′	LATITUDE ″ D.M. Meters	LONGITUDE ° ′	LONGITUDE ″ D.P. Meters	METHOD AND DATE OF LOCATION (See instructions on reverse side) OFFICE	FIELD	CHARTS AFFECTED
	Redwood Creek							
LIGHT	-- Entrance Light 2.	37-33	11.3" 348.2	122-11	46.8 1148.6	77B 2513 VIS.		18651 18652
LIGHT	-- Entrance Light 3.	37-32	57.9 1784	122-11	31.8 780	77B 2513 VIS.		" "
LIGHT	-- Entrance Light 4.	37-32	49.6 1530	122-11	38.5 944	"		" "
LIGHT	-- Light 5.	37-32	26.0 802	122-11	30.0 736	"		" "
LIGHT	-- Light 6.	37-32	25.8 795	122-11	35.7 877	"		" "
LIGHT	-- Light 7.	37-32	00.2 07	122-11	28.3 694	"		" "
LIGHT	-- Light 8.	37-32	01.4 44	122-11	34.4 844	"		" "
LIGHT	-- Light 9.	37-31	43.1 1329	122-11	37.3 916	"		" "

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RESPONSIBLE PERSONNEL		
TYPE OF ACTION	NAME	ORIGINATOR
OBJECTS INSPECTED FROM SEAWARD	No	☐ PHOTO FIELD PARTY ☐ HYDROGRAPHIC PARTY ☐ GEODETIC PARTY ☐ OTHER *(Specify)*
POSITIONS DETERMINED AND/OR VERIFIED		FIELD ACTIVITY REPRESENTATIVE
	I. Perkinson 7/20/79	OFFICE ACTIVITY REPRESENTATIVE
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW ACTIVITIES	J. Hancock, AMC 7/29/81	☒ REVIEWER ☐ QUALITY CONTROL AND REVIEW GROUP REPRESENTATIVE

INSTRUCTIONS FOR ENTRIES UNDER 'METHOD AND DATE OF LOCATION'

(Consult Photogrammetric Instructions No. 64,

OFFICE

I. OFFICE IDENTIFIED AND LOCATED OBJECTS

Enter the number and date (including month, day, and year) of the photograph used to identify and locate the object.

EXAMPLE: 75E(C)6042
8-12-75

FIELD

I. NEW POSITION DETERMINED OR VERIFIED

Enter the applicable data by symbols as follows:

F - Field	P - Photogrammetric
L - Located	Vis - Visually
V - Verified	
1 - Triangulation	5 - Field identified
2 - Traverse	6 - Theodolite
3 - Intersection	7 - Planetable
4 - Resection	8 - Sextant

A. Field positions* require entry of method of location and date of field work.

EXAMPLE: F-2-6-L
8-12-75

*FIELD POSITIONS are determined by field observations based entirely upon ground survey methods.

FIELD (Cont'd)

B. Photogrammetric field positions** require entry of method of location or verification, date of field work and number of the photograph used to locate or identify the object.

EXAMPLE: P-8-V
8-12-75
74L(C)2982

II. TRIANGULATION STATION RECOVERED

When a landmark or aid which is also a triangulation station is recovered, enter 'Triang. Rec.' with date of recovery.

EXAMPLE: Triang. Rec.
8-12-75

III. POSITION VERIFIED VISUALLY ON PHOTOGRAPH

Enter 'V-Vis.' and date.

EXAMPLE: V-Vis.
8-12-75

**PHOTOGRAMMETRIC FIELD POSITIONS are dependent entirely, or in part, upon control established by photogrammetric methods.

NOAA FORM 76-40 (8-74)
Replaces C&GS Form 567.

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

NONFLOATING AIDS FOR CHARTS

ORIGINATING ACTIVITY
- [ ] HYDROGRAPHIC PARTY
- [ ] GEODETIC PARTY
- [ ] PHOTO FIELD PARTY
- [X] COMPILATION ACTIVITY
- [X] FINAL REVIEWER
- [ ] QUALITY CONTROL & REVIEW GRP.
- [ ] COAST PILOT BRANCH

(See reverse for responsible personnel)

- [X] TO BE CHARTED
- [ ] TO BE REVISED
- [ ] TO BE DELETED

REPORTING UNIT (Field Party, Ship or Office)	STATE	LOCALITY	DATE
Coastal Mapping Div. A.M.C. Norfolk, VA	California	San Francisco and San Pablo Bays	7/20/79 7/29/81

The following objects HAVE [ ] HAVE NOT [X] been inspected from seaward to determine their value as landmarks.

OPR PROJECT NO.	JOB NUMBER	SURVEY NUMBER	DATUM
	CM-7704	TP-00536	N.A. 1927

CHARTING NAME	DESCRIPTION (Record reason for deletion of landmark or aid to navigation. Show triangulation station names, where applicable, in parentheses)	POSITION LATITUDE ° ′	LATITUDE ″ D.M. Meters	LONGITUDE ° ′	LONGITUDE ″ D.P. Meters	METHOD AND DATE OF LOCATION (See instructions on reverse side) OFFICE	FIELD	CHARTS AFFECTED
	Redwood Creek							
LIGHT	-- Light 10.	37-31	45.0 1386	122-11	42.4 1042	77B 2513 VIS		18651 18652
DAYBEACON	-- Daybeacon 11.	37-31	31.3 965	122-11	53.0 1302	"		" "
DAYBEACON	--Daybeacon 12. Not apparent on 1977 photography. Currently charted as Light 12.	37 31.6		122-119		Not VIS		" "
LIGHT	--Light 13.	37-31	15.5 477	122-12	13.6 334	77B 2513 VIS		" "
LIGHT	--Light 14.	37-31	18.3 565	122-12	17.7 434	"		" "
LIGHT	--Light 15.	37-31	03.7 113	122-12	19.8 486	"		" "
DAYBEACON	--DAYBEACON 18. Currently charted as Light 18	37-31	01.5 45	122-12	29.1 714	77B 2513 VIS		" "

RESPONSIBLE PERSONNEL		
TYPE OF ACTION	NAME	ORIGINATOR
OBJECTS INSPECTED FROM SEAWARD	No	☐ PHOTO FIELD PARTY ☐ HYDROGRAPHIC PARTY ☐ GEODETIC PARTY ☐ OTHER *(Specify)*
POSITIONS DETERMINED AND/OR VERIFIED		FIELD ACTIVITY REPRESENTATIVE
	I. Perkinson 7/20/79	OFFICE ACTIVITY REPRESENTATIVE
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW ACTIVITIES	J. Hancock, AMC 7/29/81	☒ REVIEWER ☐ QUALITY CONTROL AND REVIEW GROUP REPRESENTATIVE

INSTRUCTIONS FOR ENTRIES UNDER 'METHOD AND DATE OF LOCATION'

(Consult Photogrammetric Instructions No. 64,

OFFICE

I. OFFICE IDENTIFIED AND LOCATED OBJECTS

Enter the number and date (including month, day, and year) of the photograph used to identify and locate the object.

EXAMPLE: 75E(C)6042
8-12-75

FIELD

I. NEW POSITION DETERMINED OR VERIFIED

Enter the applicable data by symbols as follows:

F - Field	P - Photogrammetric
L - Located	Vis - Visually
V - Verified	
1 - Triangulation	5 - Field identified
2 - Traverse	6 - Theodolite
3 - Intersection	7 - Planetable
4 - Resection	8 - Sextant

A. Field positions* require entry of method of location and date of field work.

EXAMPLE: F-2-6-L
8-12-75

*FIELD POSITIONS are determined by field observations based entirely upon ground survey methods.

FIELD (Cont'd)

B. Photogrammetric field positions** require entry of method of location or verification, date of field work and number of the photograph used to locate or identify the object.

EXAMPLE: P-8-V
8-12-75
74L(C)2982

II. TRIANGULATION STATION RECOVERED

When a landmark or aid which is also a triangulation station is recovered, enter 'Triang. Rec.' with date of recovery.

EXAMPLE: Triang. Rec.
8-12-75

III. POSITION VERIFIED VISUALLY ON PHOTOGRAPH

Enter 'V-Vis.' and date.

EXAMPLE: V-Vis.
8-12-75

**PHOTOGRAMMETRIC FIELD POSITIONS are dependent entirely, or in part, upon control established by photogrammetric methods.

NOAA FORM 76-40 (8-74)
Replaces C&GS Form 567.

NONFLOATING AIDS FOR CHARTS

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

ORIGINATING ACTIVITY
- [ ] HYDROGRAPHIC PARTY
- [ ] GEODETIC PARTY
- [ ] PHOTO FIELD PARTY
- [x] COMPILATION ACTIVITY
- [x] FINAL REVIEWER
- [ ] QUALITY CONTROL & REVIEW GRP.
- [ ] COAST PILOT BRANCH

(See reverse for responsible personnel)

- [x] TO BE CHARTED
- [ ] TO BE REVISED
- [ ] TO BE DELETED

REPORTING UNIT (Field Party, Ship or Office)	STATE	LOCALITY	DATE
Coastal Mapping Div. A.M.C. Norfolk, VA	California	San Francisco and San Pablo Bays	7/20/79-7/29/81

The following objects HAVE [ ] HAVE NOT [x] been inspected from seaward to determine their value as landmarks.

OPR PROJECT NO.	JOB NUMBER	SURVEY NUMBER	DATUM
	CM-7704	TP-00536	N.A. 1927

CHARTING NAME	DESCRIPTION (Record reason for deletion of landmark or aid to navigation. Show triangulation station names, where applicable, in parentheses)	POSITION LATITUDE ° ′	LATITUDE ″ D.M. Meters	LONGITUDE ° ′	LONGITUDE ″ D.P. Meters	METHOD AND DATE OF LOCATION (See instructions on reverse side) OFFICE	FIELD	CHARTS AFFECTED
	Redwood Creek							
LIGHT	-- Light 20.	37-30	48.5 1495	122-12	40.1 984	77B 2513 VIS		18651 18652
LIGHT	-- Light 22.	37-30	34.6 1067	122-12	44.9 1103	"		" "
DAYBEACON	-- Daybeacon 23.	37-30.4		122-129		Not VIS		" "
LIGHT	-- South Channel Light 12	37-33	35.5 1096	122-12	34.0 832	77B 2514 VIS		" "
AERO	Located at San Carlos Airport	37-30	55.9 1722	122-14	56.8 1396	77B 2502 VIS		" "

RESPONSIBLE PERSONNEL		
TYPE OF ACTION	NAME	ORIGINATOR
OBJECTS INSPECTED FROM SEAWARD	No	☐ PHOTO FIELD PARTY ☐ HYDROGRAPHIC PARTY ☐ GEODETIC PARTY ☐ OTHER (Specify)
POSITIONS DETERMINED AND/OR VERIFIED		FIELD ACTIVITY REPRESENTATIVE
	I. Perkinson 7/20/79	OFFICE ACTIVITY REPRESENTATIVE
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW ACTIVITIES	J. Hancock, AMC 7/29/81	☒ REVIEWER ☐ QUALITY CONTROL AND REVIEW GROUP REPRESENTATIVE

INSTRUCTIONS FOR ENTRIES UNDER 'METHOD AND DATE OF LOCATION'

(Consult Photogrammetric Instructions No. 64.)

OFFICE

I. OFFICE IDENTIFIED AND LOCATED OBJECTS

Enter the number and date (including month, day, and year) of the photograph used to identify and locate the object.

EXAMPLE: 75E(C)6042
8-12-75

FIELD

I. NEW POSITION DETERMINED OR VERIFIED

Enter the applicable data by symbols as follows:

F - Field	P - Photogrammetric
L - Located	Vis - Visually
V - Verified	
1 - Triangulation	5 - Field identified
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4 - Resection	8 - Sextant

A. Field positions* require entry of method of location and date of field work.

EXAMPLE: F-2-6-L
8-12-75

*FIELD POSITIONS are determined by field observations based entirely upon ground survey methods.

FIELD (Cont'd)

B. Photogrammetric field positions** require entry of method of location or verification, date of field work and number of the photograph used to locate or identify the object.

EXAMPLE: P-8-V
8-12-75
74L(C)2982

II. TRIANGULATION STATION RECOVERED

When a landmark or aid which is also a triangulation station is recovered, enter 'Triang. Rec.' with date of recovery.

EXAMPLE: Triang. Rec.
8-12-75

III. POSITION VERIFIED VISUALLY ON PHOTOGRAPH

Enter 'V-Vis.' and date.

EXAMPLE: V-Vis.
8-12-75

**PHOTOGRAMMETRIC FIELD POSITIONS are dependent entirely, or in part, upon control established by photogrammetric methods.

NOAA FORM 76-40 (8-74)

Replaces C&GS Form 567.

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

LANDMARKS FOR CHARTS

ORIGINATING ACTIVITY
- [ ] HYDROGRAPHIC PARTY
- [ ] GEODETIC PARTY
- [ ] PHOTO FIELD PARTY
- [X] COMPILATION ACTIVITY
- [X] FINAL REVIEWER
- [ ] QUALITY CONTROL & REVIEW GRP.
- [ ] COAST PILOT BRANCH

(See reverse for responsible personnel)

- [X] TO BE CHARTED
- [ ] TO BE REVISED
- [ ] TO BE DELETED

REPORTING UNIT (Field Party, Ship or Office)	STATE	LOCALITY	DATE
Coastal Mapping Div. AMC, Norfolk, VA	Virginia	San Francisco and San Pablo Bays	7/20/79 7/29/81

The following objects HAVE [ ] HAVE NOT [X] been inspected from seaward to determine their value as landmarks.

OPR PROJECT NO.	JOB NUMBER	SURVEY NUMBER	DATUM
	CM-7704	TP-00536	NA 1927

CHARTING NAME	DESCRIPTION (Record reason for deletion of landmark or aid to navigation. Show triangulation station names, where applicable, in parentheses)	POSITION LATITUDE ° ′	LATITUDE ″ D.M. Meters	LONGITUDE ° ′	LONGITUDE ″ D.P. Meters	METHOD AND DATE OF LOCATION (See instructions on reverse side) OFFICE	FIELD	CHARTS AFFECTED
RADIO TOWER (KNBR)	(RADIO STATION KNBC TALL MAST, 1955)	37 32	49.793 / 1535.1	122 13	58.002 / 1423.8	77 B 3747 VIS		18651 18652
RADIO TOWER (KNBR)	(KPO COMMERCIAL RADIO STATION, EAST TOWER, 1934)	37 32	50.434 / 1554.8	122 13	54.368 / 1334.6	77 B 3747 VIS		"
DOME	(REDWOOD CITY COURTHOUSE DOME, 1931)	37 29	13.40 / 413.1	122 13	42.86 / 1053.0	77 B 2503 VIS		"
TALLER* TOWER	S.E. tower, Belmont Slough (TRANSMISSION TOWER No. 7, 1931)	37 32	57.568 / 1774.8	122 14	50.830 / 1247.7	77 B 2514		"
TALLER* TOWER	N.W. tower, Belmont Slough (TRANSMISSION TOWER No. 8, 1931)	37 33	02.830 / 87.2	122 15	00.157 / 03.9	77 B 2514 VIS		"
TALLER* TOWER	S.E. tower, Steinberger Slough (TRANSMISSION TOWER No. 9, 1931)	37 32	15.394 / 474.6	122 13	35.933 / 882.2	77 B 2514 VIS		"
TALLER* TOWER	N.W. tower, Steinberger Slough	37 32	21.3	122 13	46.6	77 B 2514 VIS		"
TOWER*	N.W. tower, Redwood Creek (REDWOOD CREEK NORTH SIDE TRANSMISSION TOWER, 1931)	37 31.5		122 12.2		Tower appears rebuilt	destroyed and	"
TOWER*	S.E. tower, Redwood Creek (REDWOOD CREEK SOUTH SIDE TRANSMISSION TOWER, 1931)	37 31.4		122 12.0		Tower appears rebuilt.	destroyed and	"
*See Review Report, Item #65 Concerning these Towers								

RESPONSIBLE PERSONNEL		
TYPE OF ACTION	NAME	ORIGINATOR
OBJECTS INSPECTED FROM SEAWARD	No	☐ PHOTO FIELD PARTY ☐ HYDROGRAPHIC PARTY ☐ GEODETIC PARTY ☐ OTHER (Specify)
POSITIONS DETERMINED AND/OR VERIFIED		FIELD ACTIVITY REPRESENTATIVE
	I. Perkinson 7/20/79	OFFICE ACTIVITY REPRESENTATIVE
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW ACTIVITIES	J. Hancock, AMC 7/29/81	☒ REVIEWER ☐ QUALITY CONTROL AND REVIEW GROUP REPRESENTATIVE

INSTRUCTIONS FOR ENTRIES UNDER 'METHOD AND DATE OF LOCATION'

(Consult Photogrammetric Instructions No. 64.

OFFICE

I. OFFICE IDENTIFIED AND LOCATED OBJECTS

Enter the number and date (including month, day, and year) of the photograph used to identify and locate the object.

EXAMPLE: 75E(C)6042
8-12-75

FIELD

I. NEW POSITION DETERMINED OR VERIFIED

Enter the applicable data by symbols as follows:

F - Field	P - Photogrammetric
L - Located	Vis - Visually
V - Verified	
1 - Triangulation	5 - Field identified
2 - Traverse	6 - Theodolite
3 - Intersection	7 - Planetable
4 - Resection	8 - Sextant

A. Field positions* require entry of method of location and date of field work.

EXAMPLE: F-2-6-L
8-12-75

*FIELD POSITIONS are determined by field observations based entirely upon ground survey methods.

FIELD (Cont'd)

B. Photogrammetric field positions** require entry of method of location or verification, date of field work and number of the photograph used to locate or identify the object.

EXAMPLE: P-8-V
8-12-75
74L(C)2982

II. TRIANGULATION STATION RECOVERED

When a landmark or aid which is also a triangulation station is recovered, enter 'Triang. Rec.' with date of recovery.

EXAMPLE: Triang. Rec.
8-12-75

III. POSITION VERIFIED VISUALLY ON PHOTOGRAPH

Enter 'V-Vis.' and date.

EXAMPLE: V-Vis.
8-12-75

**PHOTOGRAMMETRIC FIELD POSITIONS are dependent entirely, or in part, upon control established by photogrammetric methods.

EVELLE J. YOUNGER
ATTORNEY GENERAL

STATE OF CALIFORNIA

Walt any prob with this? No problem
DEB. C344
C342
C341

OFFICE OF THE ATTORNEY GENERAL

Department of Justice

STATE BUILDING, SAN FRANCISCO 94102

(415) 557-2210

January 28, 1977

Commander James Collins
National Ocean Survey
Rockville, Maryland 20852

Dear Commander Collins:

This letter is to confirm our conversation of January 27, 1977 respecting the upcoming NOS phytogrammetric survey of South San Francisco Bay.

For costs reasons we have decided not to ask you to map the east shore at 1:10,000 scale, but we will be interested in obtaining the results of your 1:20,000 mapping, including the geodetic control data.

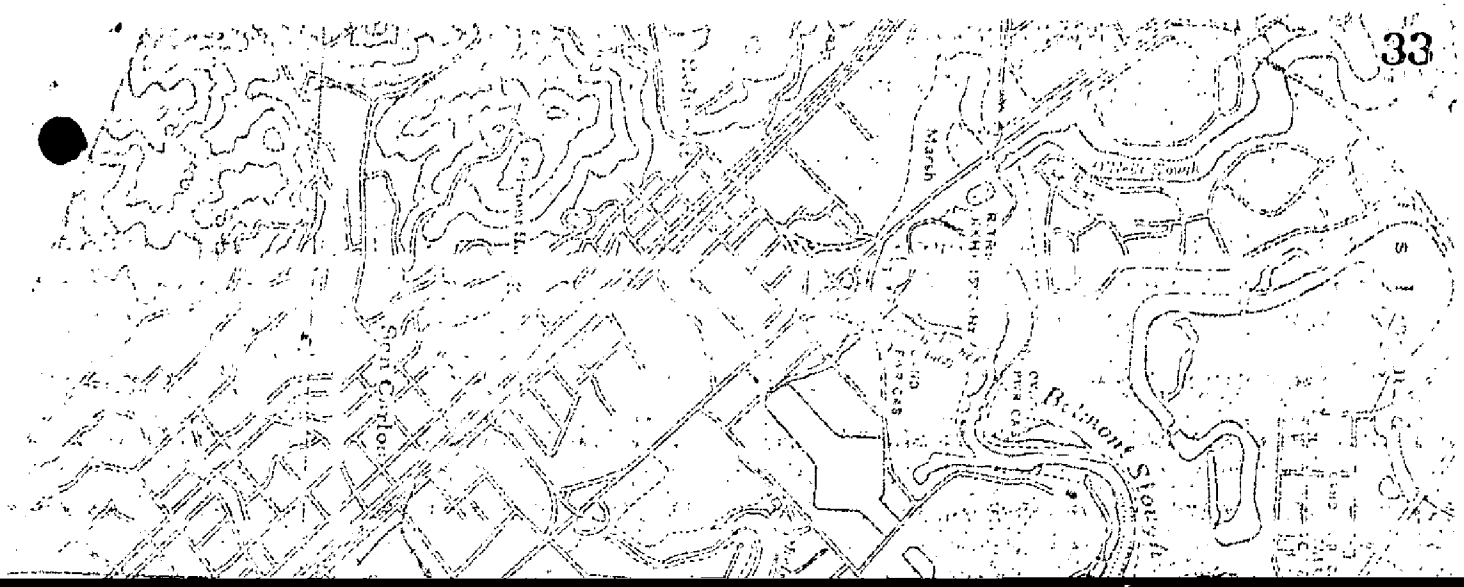
[redacted]

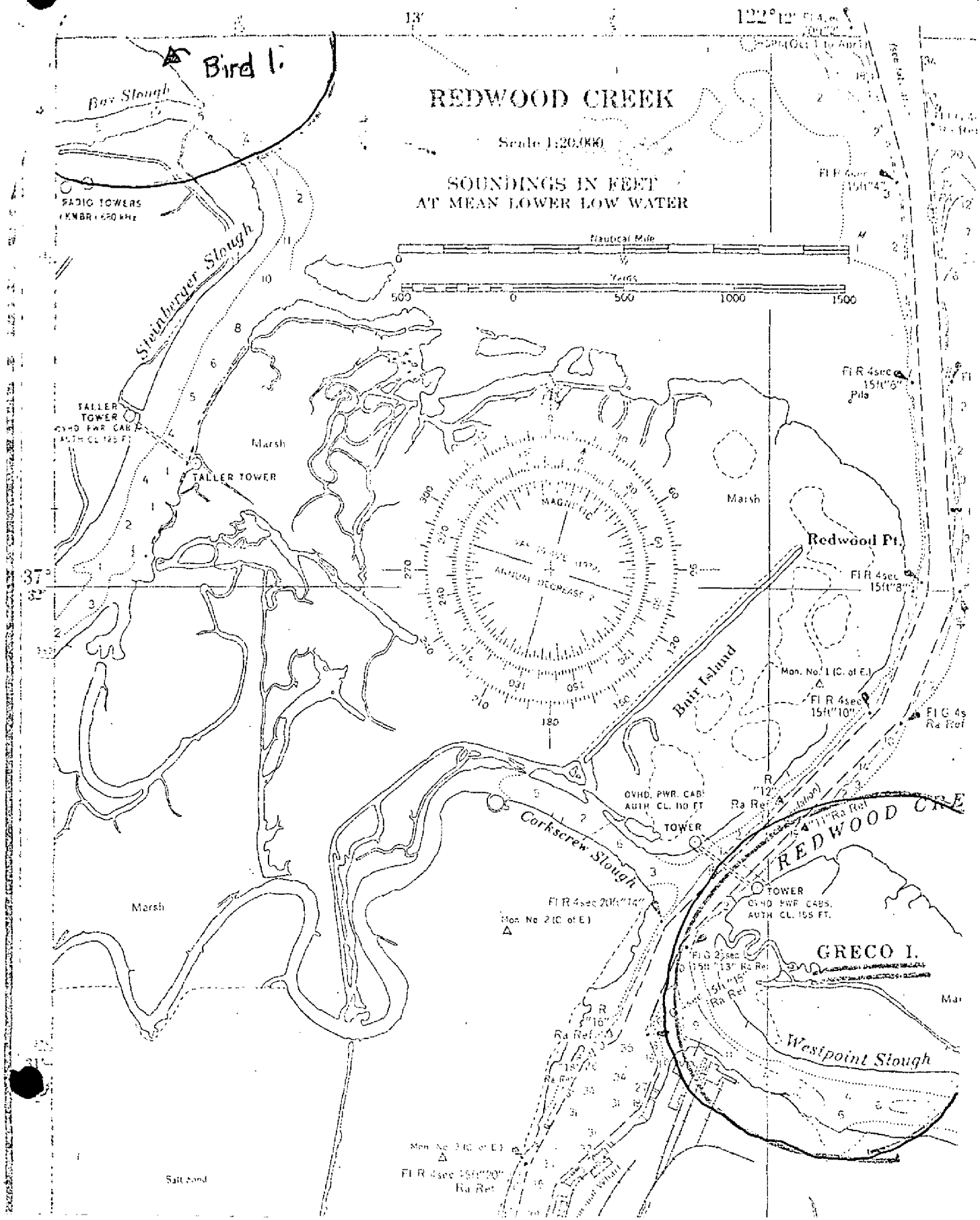
are interested in obtaining the mean low water line in the vicinity of Bird and Greco Islands at a scale of 1:10,000. (The attached portions of chart 5531 indicate the areas of our concern.) I understand that this portion of Greco was to be done at this scale as part of the Redwood Creek insert to 5531 in any event.

Thank you very much for the continuing courtesy, helpfulness of you and your agency.

Very truly yours,

EVELLE J. YOUNGER
Attorney General


Belmont Stone


Bird I.
Bay Slough
REDWOOD CREEK
Scale 1:20,000
SOUNDINGS IN FEET
AT MEAN LOWER LOW WATER
Nautical Mile
Yards
500
0
500
1000
1500
RADIO TOWERS
Steinberger Slough
TALLER TOWER
TALLER TOWER
Marsh
Marsh
Redwood Pt.
Bair Island
Mon. No. 1 (C. of E.)
Corkscrew Slough
OVHD. PWR. CABS
AUTH. CL. 110 FT
TOWER
REDWOOD CREEK
TOWER
OVHD. PWR. CABS.
AUTH. CL. 155 FT.
GRECO I.
Westpoint Slough
Marsh
Mon. No. 2 (C. of E.)
Salt pond
MAGNETIC
ANNUAL DECREASE

(3-25-63)

NAUTICAL CHART DIVISION

RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. TP-00536

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
18651	4/26/82	R C. Larson RCS	Full ~~Part~~ Before After Verification Review Inspection Signed Via
			Drawing No. 39 Critical corr only
18652	12-29-82	R.C. Larson VW	Full ~~Part Before~~ After Verification Review Inspection Signed Via
			Drawing No. 25
			Full Part Before After Verification Review Inspection Signed Via
			Drawing No.
			Full Part Before After Verification Review Inspection Signed Via
			Drawing No.
			Full Part Before After Verification Review Inspection Signed Via
			Drawing No.
			Full Part Before After Verification Review Inspection Signed Via
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			Full Part Before After Verification Review Inspection Signed Via
			Drawing No.
			Full Part Before After Verification Review Inspection Signed Via
			Drawing No.

FORM C&GS-8352 SUPERSEDES ALL EDITIONS OF FORM C&GS-975.

USCOMM-DC 8558-P63