

5931

Diag'd. on Diag. Ch. No. 5530-4

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey SHORELINE

Field No. CS-262-B Office No. T-5931

LOCALITY

State CALIFORNIA

General locality SAN FRANCISCO BAY

Locality PINOLE POINT

1943-'44

CHIEF OF PARTY

G.E. Morris, Jr.

LIBRARY & ARCHIVES

DATE Aug 30 - 1949

8-1870-1 (1)

5931

DATA RECORD

T- 5931

Quadrangle (II): None

Project No. (II): CS-262 B

Field Office: San Francisco,
Calif.

Chief of Party: Capt. E. J. Pagenhart

Compilation Office: Tampa, Florida

Chief of Party: George E. Morris Jr.
Lt. Comdr.

Instructions dated (II III): 8 Feb. 1944

Division of
Copy filed in descriptive
 Report No. T- (VI)
Photogrammetry Office Files

Completed survey received in office:

Reported to Nautical Chart Section:

Reviewed: 7 Oct. 1948

Applied to chart No.

Date:

Redrafting Completed:

Registered: 25 Aug 1949

Published:

Compilation Series: 1:10,000

Published Scale:

Scale Factor: (III): None

Geographic Datum (III): N.A. 1927

Datum Plane (III): M.H.W.

Reference Station (III): Oleum, Union Oil Co. Stack, 1932

Lat.: 38° 03' 02" 417
(74.5m)Long.: 122° 15' 28" 030
(683.4m) ~~xxxxxxx~~ Adjusted

State Plane Coordinated (VI):

K =

Y =

Military Grid Zone (VI)

PHOTOGRAPHS (III)

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Scale</u>	<u>Stage of Tide</u>
14021 to 14029 inclusive	6/2/43	2:30 P.M.	1:10,000	4.75'

Tide from (III): Pinole Point (Sub. Sta.)
San Francisco (Ref. Sta.)

Mean Range: 4.4' ~~Original~~ Range: 6.1'

Camera: (kind or source) U.S.C & G.S. 9 lens, 8 $\frac{1}{4}$ " focal length

Field Inspection by: C. A. Kester ✓ date: 1944

Field Edit by: None date:

Date of Mean High-Water Line Location (III): Date of Photos

Projection and Grids ruled by (III) S.R.

date: March 14, 45

" " " checked by: S.R.

date: " " "

Control plotted by: D.G. Singleton

date: April 13, 1945

Control checked by: B.H. Lyon

date: " " "

Radial Plot by: M.M. Slavney

date: July 1946

Detailed by: R.A. Reece

date: August, September

Reviewed in compilation office by: J.A. Giles

date: October 1946

Elevations on Field Edit Sheet
checked by:

date:

STATISTICS (III)

Land Area (Sq. Statute Miles): 16

Shoreline (More than 200 meters to opposite shore): 13 Statute mi.

Shoreline (Less than 200 meters to opposite shore): 16 " "

Number of Recoverable Topographic Stations established: 10

Number of Temporary Hydrographic Stations located by radial plot:

Leveling (to control contours) - miles:

Roman numerals indicate whether the item is to be entered by, (II) Field Party, (III) Compilation Party, or, (VI) the Washington Office.

When entering names of personnel on this record give the surname and initials (not initials only).

Remarks:

MAP T. 5931 PROJECT NO. 262 SCALE OF MAP 1:10000 SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR Y-COORDINATE LONGITUDE OR X-COORDINATE	DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS		DATUM CORRECTION	N.A. 1927-DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS
				FORWARD	(BACK)		FORWARD	(BACK)	
POINT PINOLE 4, 1940	G.P.	N.A. 1927	38° 00' 42.163"	1300.0					
			122° 21' 56.319"	1373.9					
POINT PINOLE WHARF			38° 00' 54.952"	1694.3					
OUTER POINT, 1911	G.P.	N.A. 1927	122° 21' 45.117"	1100.6					
GIANT POWDER CO.			37° 59' 58.887"	1815.6					
WATER TANK	G.P.	N.A. 1927	122° 21' 42.353"	1033.4					
LONE TREE POINT			38° 02' 19.045"	587.2					
IRON ROD (U.S.E.) 1903	G.P.	N.A. 1927	122° 16' 19.550"	476.7					
LONE TREE POINT			38° 02' 18.18"	560.5					
HIGHER STACK, 1911	G.P.	N.A. 1927	122° 16' 19.26"	469.7					
OILUM, CENTER OF			38° 03' 03.108"	95.8					
OUTER OIL TANK, 1911	G.P.	N.A. 1927	122° 15' 25.077"	611.4					
RODEO, UNION OIL CO.			38° 03' 02.417"	74.5					
STACK, 1932	G.P.	N.A. 1927	122° 15' 28.030"	683.4					
TORMEY, 1929	G.P.	N.A. 1927	38° 03' 12.525"	386.2					
			122° 14' 32.206"	785.2					
SELBY, 1911	G.P.	N.A. 1927	38° 03' 17.085"	526.8					
			122° 14' 41.312"	1007.2					
CONCRETE STACK			38° 03' 26.129"	805.6					
1938	G.P.	N.A. 1927	122° 14' 36.657"	893.7					
SELBY STACK No 2			38° 03' 18.679"	575.9					
1911	G.P.	N.A. 1927	122° 14' 44.864"	1093.8					
SELBY STACK ON			38° 03' 16.863"	519.9					
SHOT TOWER, 1911	G.P.	N.A. 1927	122° 14' 48.418"	1180.4					

Stations underlined in red were added to the Map Manuscript during Review.

1 FT. = .3048006 METER

COMPUTED BY:

DATE:

CHECKED BY:

DATE:

N-2388-12

MAP T. 5931 PROJECT NO. 262 SCALE OF MAP 1:10,000 SCALE FACTOR

[illegible]

1 FT. = 3048006 METER

COMPUTED BY:...

DATE:

CHECKED BY:

DATE _____

M-2388-12

Field Inspection T-5931

The Field Inspection Report for Air Photographs by
C. A. Kester, Project C&-262-B, Sheets T-5927 - 28 - 31
is filed in the Division of Photogrammetry General File.

MAIN RADIAL PLOT
SHEET No. T-5931
PROJECT No. 262 (CALIFORNIA)

The projection for this sheet was received in this office on 25 August 1944. Control was carefully plotted and checked by members of the control section using the beam compass and meter bar method.

A circle with a 14 inch radius was drawn on each photograph in order to facilitate use of the central portions of photographs in preference to the outer extremities which may be affected in marked

Pass points were selected in a regular quadrilateral scheme, in order to strengthen the graphic control scheme, as represented by the main radial plot. All azimuths and cross azimuths were established by means of the stereoscope and radial liner method.

All photographs used for this plot were printed on unmounted acetate impregnated paper thus necessitating treatment for the effect of paper distortion. This has been accomplished by the use of non-shrinking vinylite material on which rays have been drawn to the corners and to the mid-points of the sides of a square format. The templates were made by adjusting these rays to the corners and to the collimation marks of the photographs when drawing radials to control and pass points.

Discussion of the main radial plot follows:

The control for this plot is well distributed over the entire area covered and has been properly identified ; therefore, the plot may be considered well controlled.

The 9-lens photograph coverage was sufficient both for radial plotting purposes and for detailing except in the area south of Latitude $38^{\circ} 00' 20''$ and east of Longitude $122^{\circ} 15' 20''$. In this area photograph coverage was sufficient only for two cut intersections. While it is believed that the pass points which have been established in this area have strong positions it is suggested that no detailing be attempted in any part of the sheet where it has been impossible to secure three point intersections. This is suggested primarily because the rugged nature of the terrain will cause difficulty in properly detailing from the outer extremes of the photographs and not because of any implied probability of radial plot error.

C CLOSURE AND ADJUSTMENT

The plot was laid in the usual manner. The templet with the strongest fix on control was laid first with templets with progressively weaker fixes following in order . Very good intersections were obtained throughout and all control was held on all photographs.

D AREAS OF QUESTIONABLE ACCURACY

It is believed that all parts of this sheet fall within the prescribed limits of accuracy.

When this plot was laid a discrepancy in the position of identical points on the junction of T-5931 and T-5941 was discovered. This discrepancy was about thirty-five meters at the extreme south end of the junction and became progressively less to the northward. At the shoreline, in the vicinity of latitude $38^{\circ} 01'$, all points were in good agreement. A sufficient portion of the plot for T-5941 was re-run using triangulation station HIGHER TRANS* MISSION TOWER, 1944 which was not available for the original radial plot for T-5941 to effect a satisfactory junction with T-5931.

It may be noted that the eastern portion of the radial plot for T-5931 was re-run at the same time. This work verified the plot for T-5931 and the entire plot was carried far enough into T-5941 to assure good results. The necessary changes will be made on T-5941 in accordance with this radial plot.

E. GENERAL

Pass points were picked on the projection and have been indicated with blue inked circles of 2.8 and 1.5 mm radii. Photograph centers have been indicated by the use of double blue circles of 4.0 mm and 2.0 mm radii.

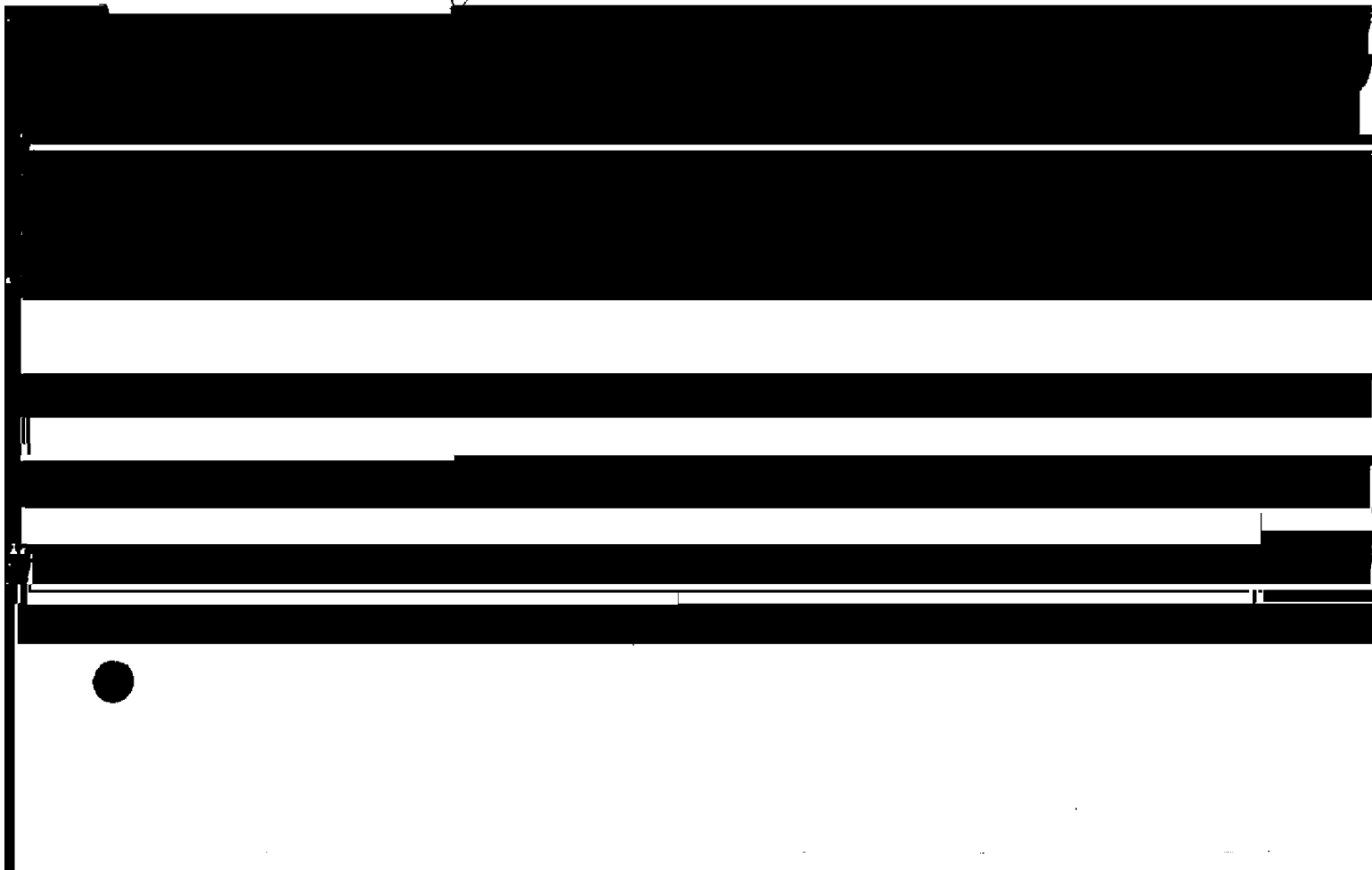
Respectfully submitted,

Bennie H. Lyon
Asst. Photo. Engr.

Forwarded through

George E. Morris, Jr.
George E. Morris, Jr.
Chief of Party.

Milton M. Slavney
Milton M. Slavney
Photo. Engineer.



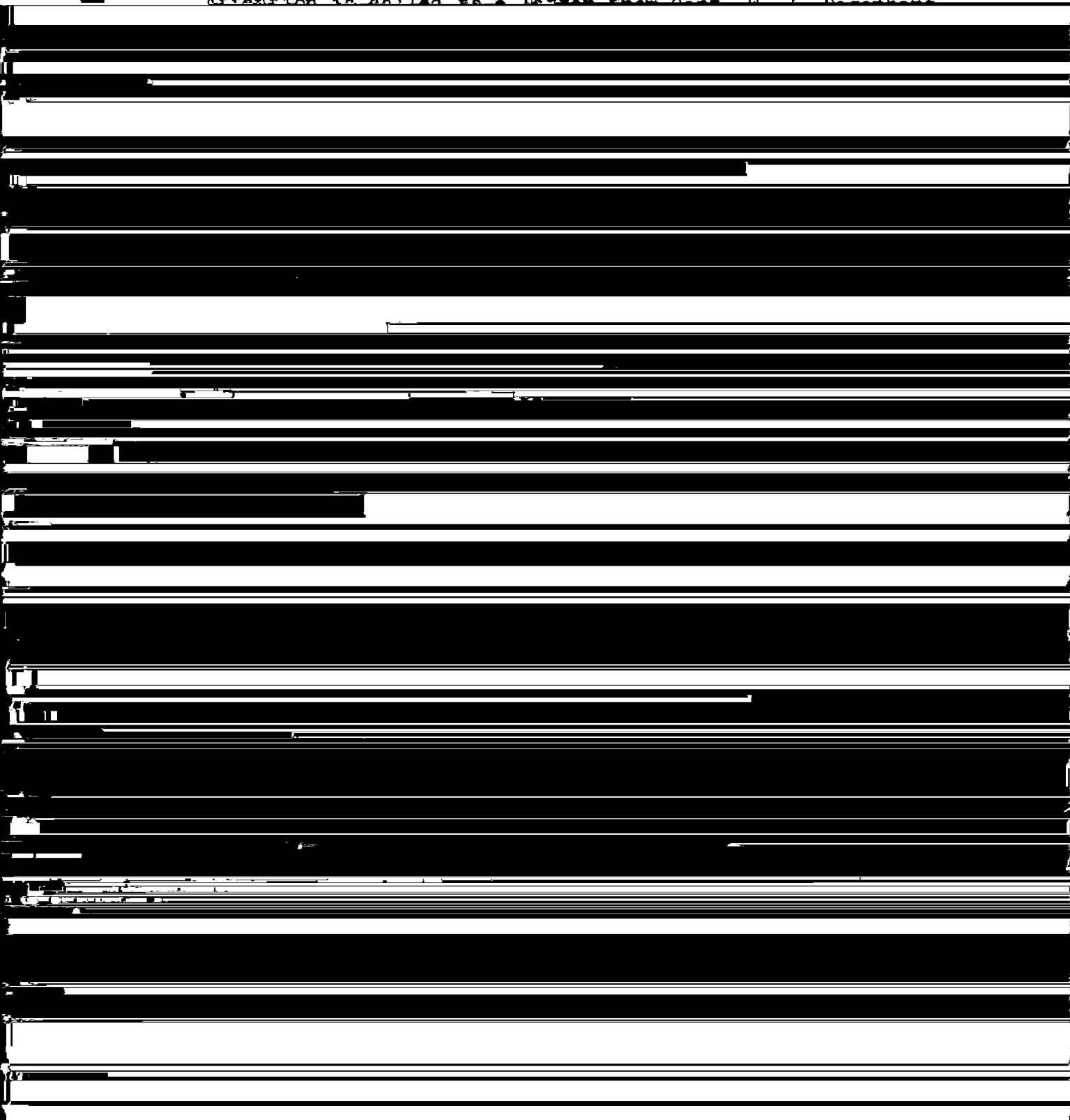
COMPILATION REPORT
TO ACCOMPANY
MAP MANUSCRIPT No. T-5931
PROJECT CS 262 B

26 and 27 CONTROL AND RADIAL PLOT

Bennie H. Lyon and

A special report by M. M. Slavney, Asst. Photogrammetric Engineers covering main radial plot is submitted herewith.

Attention is called to a letter from Capt. D. J. Deanehart



34 LANDMARKS AND AIDS TO NAVIGATION.

All Landmarks and Aids to Navigation recovered by field party have been listed on form No. 567 and made a part of this report.

35 HYDROGRAPHIC CONTROL.

Instructions to field party, dated February 8, 1944, state that no hydrographic stations need be selected by them for this project.

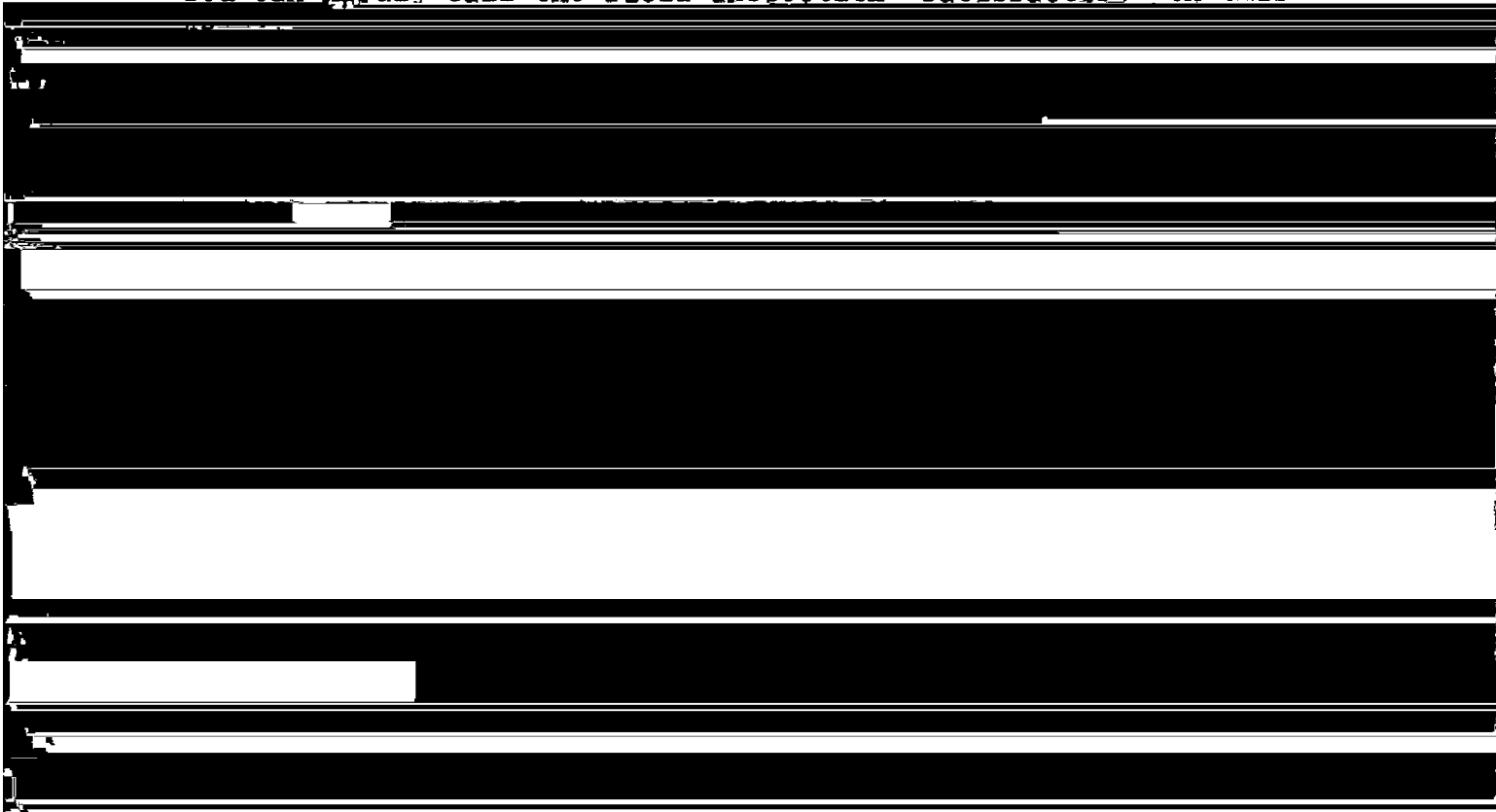
36 LANDING FIELDS AND AERONAUTICAL AIDS.

None are shown on the map manuscript.

37 FIELD INSPECTION INADEQUACIES.

Field inspection was very scant and left too much to the imagination of the draftsman. Roads, among other things, were not labeled or classified to any extent. It was not easy to discern between the roads, trails and firebreaks in many instances. Many trails, visible on the photographs, have the appearance of not being permanent and of any consequence, have not been marked "out" by the field inspector.

Vegetation was not labeled. The field inspector did not differentiate between brush or scrub growth and tree covered areas. Limits of vegetation and cultivation have been shown as discerned by the draftsman. Fences, ditches, hedges etc. were not indicated nor were temporary ground lines separated from permanent features. You can hardly call the field inspection "satisfactory" on this



DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

NON-FLOATING LANDMARKS FOR CHARTS

TO BE CHARTED
~~TO BE CHARTED~~

STRIKE OUT ONE

Tampa Photogrammetric Office 30 Sept. 1946

I recommend that the following objects which have ~~been~~ been inspected from seaward to determine their value as landmarks, be charted on ~~(XXXX-XXXX)~~ the charts indicated.

The positions given have been checked after listing by

W. W. Dawsey, Photogrammetric Aid

Lt. Comdr. George E. Morris Jr.

Chief of Party

CALIFORNIA				POSITION				METHOD OF LOCATION AND SURVEY No.	DATE OF LOCATION	CHARTS AFFECTED		
STATE	CHARTING NAME	DESCRIPTION	SIGNAL NAME	LATITUDE		LONGITUDE				HARBOR CHART	INSHORE CHART	OFFSHORE CHART
				° ' "	D. M. METERS	° ' "	D. P. METERS					
	Signal Tower	(U.S.E.D.) Signal	Rodeo	38 01	1473	122 16	640	N.A. 1927	1941	X	X	5533
	Tank	Red Wooden	None	38 01	1740	122 16	257	"	"	X	X	"
	Tank	Water	"	38 00	1412	122 17	153	"	1944	X	X	"
	Stack	Steel	"	38 01	408	122 17	173	"	"	X	X	"
		Cupola	"	38 00	678	122 19	487	"	1941	X	X	"
	Tank		"	38 00	106	122 20	970	"	"	X	X	"
	Stack		"	38 00	489	122 21	213	"	"	X	X	"
	Stack	Concrete	"	37 59	1745	122 21	878	"	"	X	X	"
	W. Gable	Bldg. on wharf	"	38 00	1707	122 21	1128	"	"	X	X	"
	E. Gable	" "	"	38 00	1700	122 21	1084	"	"	X	X	"
	Stack	(Triang.) Selby Stack No.2	"	38 03	576	122 14	1094	"	Triang 1932	X	X	"
	Stack	(Triang.) Rodeo, Union Oil Co	"	38 03	75.5	122 15	683.4	"	"	X	X	"
				65 (1947)								

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and nonfloating aids to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

**TO BE DELETED
TO BE DELETED**

MONITORING AND LANDMARKS FOR CHARTS

STRIKE OUT ONE

Tampa Photogrammetric Office 30 Sept. 1946

I recommend that the following objects which have ~~(XXXXXX)~~ been inspected from seaward to determine their value as landmarks, be ~~XXXXXX (deleted from)~~ the charts indicated.

C. C. Andrews

The positions given have been checked after listing by

Lt. Comdr. George E. Morris Jr. Chief of Party.

Chief of Party.

[illegible]

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *nonfloating aids* to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

Survey No.

[illegible]

GEOGRAPHIC NAMES

Survey No.

Sheet No. 2

Name on Survey

	On Chart No.	On previous survey No.	On U. S. quadrangle Maps	From local information	On local Maps	P. O. Guide or Map	Rand McNally Atlas	U. S. Light List	
A	B	C	D	E	F	G	H	K	
✓ Selby									1
✓ Oleum									2
✓ Davis Point									3
State Highway NO. 4	mit								4
✓ Rodeo									5
✓ Rodeo Creek									6
✓ Lonetree Point									7
✓ Pinole*									8
Refugio Valley	mol								9
✓ Hercules									10
✓ Hercules Wharf									11
Pinole Station	mit	5							12
✓ Pinole Creek									13
Pinole Ridge	mit								14
✓ Nobhill									15
✓ Tormey									16
									17
									18
									19
									20
									21
									22
									23
									24
									25
									26
									27

* - Decis. of BGN.

Underlined names approved.
10-5-48.

a.f.w.

Division of Photogrammetry
Review Report of
Shoreline Survey Manuscript T-5931

(This compilation originally planned and indexed as a Planimetric Map, was changed to a Shoreline Survey due to the inaccurate detailing and lack of Field Inspection information of all inshore areas.)

Subject numbers not used in this report have been adequately covered in other parts of the Descriptive Report.

26. Control

All Triangulation Stations falling within the limits of the map manuscript are listed on form M-2388-12 (attached to the descriptive report). Stations underlined in red were added during review.

28. Detailing

The map manuscript detail is not in good agreement with the photographs and many of the features on the map manuscript had not been identified. The shoreline was revised to agree with the photographs; but no attempt was made to correct or supplement the inshore information. The limit for drafting detail has been outlined on the map manuscript. This shoreline-survey adjoins two other shoreline-surveys to the south, T-5927 and T-5928.

44. Comparison with Existing Topographic Surveys:

T-316	1:10,000	1851	T-2445 a	1:10,000	1909
T-561	1:10,000	1855	T-3126	1:10,000	1911
T-562	1:10,000	1856	T-1696 a	1:10,000	1921
T-1696	1:10,000	1886	T-1697 a	1:10,000	1921
T-1697	1:10,000	1886	T-4022	1:10,000	1921
T-2445	1:10,000	1896	T-6733	1:10,000	1939

45. Comparison with Nautical Charts

5533 1:40,000 1940 (48-3/8)

51. Application to Nautical Charts

Reviewed by:

Under direction of:

J. J. Streifler

J. J. Streifler
7 October 1948

S. V. Griffin

Chief, Review Section

Approved by:

B. G. Gores

Technical Assistant to Chief
Division of Photogrammetry

H. C. Edmundson

Chief, Nautical Chart Branch
Division of Charts

K. T. Adams

Chief, Div. of Photogrammetry

W. M. Saife

Chief, Div. of Coastal Surveys

NAUTICAL CHARTS BRANCH

SURVEY NO. T 5931

Record of Application to Charts

[illegible]

M.2168-1

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.

T-5931

17 March 1950

Rear Admiral K.T. Adams
Acting Director
United States Coast and Geodetic Survey
Department of Commerce

Dear Admiral Adams:

Your memorandum, file No. 731-eal, dated 12 December 1949, addressed to the Director of Intelligence, United States Air Force, forwarding seventeen (17) maps for security clearance, was referred to the Assistant Chief of Staff, G-2 for action.

There is no objection to the publication of the following maps as unclassified:

T-5920 Point Avisadero - Point San Bruno
T-5929 San Quentin - California City
T-5931 Davis Point - Pinole Point
T-5936 Vallejo, California

Provided minor deletions are made as indicated on each map, there is no objection to publication of the following maps as unclassified:

T-5922 (MS) San Francisco Bay and Oakland Area, California
T-5923 San Francisco Bay and Oakland Area, California
T-5924 (MS) San Francisco Bay and Oakland Area, California