

11878

orig

Diag. Cht. No. 5101-2.

Form 504

U. S. DEPARTMENT OF COMMERCE  
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Type of Survey SHORELINE (PHOTOGRAMMETRIC)

Field No. PH 6011 Office No. T-11878

LOCALITY

State CALIFORNIA

General locality SAN DIEGO

Locality SUNSET CLIFFS

1960 - 19 6 2

CHIEF OF PARTY

FRED NATELLA, CHIEF OF PARTY  
P. A. STARK, PHOTOGRAMMETRIC OFFICE

LIBRARY & ARCHIVES

DATE \_\_\_\_\_

USCOMM-DC 5087

11878  
PH 6011

**DESCRIPTIVE REPORT - DATA RECORD**  
T - 11878

PROJECT NO. (II):			
21033			
FIELD OFFICE (II):		CHIEF OF PARTY	
OCEANBIDE, CALIFORNIA		FRED NATELLA	
PHOTOGRAMMETRIC OFFICE (III):		OFFICER-IN-CHARGE	
PORTLAND, OREGON		P. A. STARK	
INSTRUCTIONS DATED (II) (III):			
	DECEMBER 20, 1960	II, III	
AMENDMENT 1,	AUGUST 31, 1961	II, III	
AMENDMENT 1,	APRIL 25, 1963	III	
AMENDMENT 2,	OCTOBER 1, 1963	III	
METHOD OF COMPILATION (III):			
KELBH INSTRUMENT			
MANUSCRIPT SCALE (III):		STEREOSCOPIC PLOTTING INSTRUMENT SCALE (III):	
1:10,000		1:6000	
		PANTOGRAPH SCALE 1:10,000	
DATE RECEIVED IN WASHINGTON OFFICE (IV):		DATE REPORTED TO NAUTICAL CHART BRANCH (IV):	
APPLIED TO CHART NO.		DATE:	DATE REGISTERED (IV):
GEOGRAPHIC DATUM (III):		VERTICAL DATUM (III):	
N.A. 1927		MEAN SEA LEVEL EXCEPT AS FOLLOWS: <i>Elevations shown as (25) refer to mean high water</i> <i>Elevations shown as (5) refer to sounding datum</i> <i>i.e., mean low water or mean lower low water</i>	
REFERENCE STATION (II):			
RESERVE, 1933			
LAT.:	LONG.:	<input checked="" type="checkbox"/> ADJUSTED	
32° 41' 31.847"	117° 15' 05.565"	<input type="checkbox"/> UNADJUSTED	
PLANE COORDINATES (IV):		STATE	ZONE
Y = 192,684.70	X = 1,691,852.71	CALIFORNIA	6
ROMAN NUMERALS INDICATE WHETHER THE ITEM IS TO BE ENTERED BY (II) FIELD PARTY, (III) PHOTOGRAMMETRIC OFFICE, OR (IV) WASHINGTON OFFICE. WHEN ENTERING NAMES OF PERSONNEL ON THIS RECORD GIVE THE SURNAME AND INITIALS, NOT INITIALS ONLY.			

## DESCRIPTIVE REPORT - DATA RECORD

FIELD INSPECTION BY (III):  R. B. MELBY		DATE:  MARCH - MAY 1962
MEAN HIGH WATER LOCATION (III) (STATE DATE AND METHOD OF LOCATION):  FIELD INSPECTION APRIL 1962  COMPILATION BY KELBH INSTRUMENT		
PROJECTION AND GRIDS RULED BY (IV):  A. ROUNDTREE		DATE  5-2-63
PROJECTION AND GRIDS CHECKED BY (IV):  L. F. BEUGNET		DATE  5-3-63
CONTROL PLOTTED BY (III):  D. N. WILLIAMS		DATE  5-24-63'
CONTROL CHECKED BY (III):  R. H. MEYER		DATE  5-24-63
RADIAL PLOT OR STEREOSCOPIC CONTROL EXTENSION BY (III):  H. P. EICHERT		DATE  APRIL 1963
STEREOSCOPIC INSTRUMENT COMPILATION (III):	PLANIMETRY  D. N. WILLIAMS	DATE  7-27-64
	CONTOURS	DATE
MANUSCRIPT DELINEATED BY (III):		DATE
SCRIBING BY (III): SCRIBING - R. B. MELBY STICK-UP - C. C. HARRIS		DATE 9-16-64 10-22-64
PHOTOGRAMMETRIC OFFICE REVIEW BY (III): ROUGH DRAFT - J. L. HARRIS ADVANCE - C. C. HARRIS		DATE 8-4-64 9-18-64
REMARKS:		

DESCRIPTIVE REPORT - DATA RECORD

CAMERA (KIND OR SOURCE) (III):

C&GS TYPE S

PHOTOGRAPHS (III)

NUMBER	DATE	TIME	SCALE	STAGE OF TIDE
60 S 484A THRU 487A	9-2-60	10:00	1:30,000	2.9' ABOVE M.L.L.W.
60 S 476A THRU 478A	"	09:45	1:20,000	3.0' " "
RATIO PRINTS OF ABOVE AT 1:10,000				
60 S 626A THRU 629A	9-2-60	11:58	1:10,000	1.6' " "
RATIO PRINTS OF ABOVE AT 1:5000				
60 S 601A AND 602 A	9-2-60	11:43	"	1.6' " "
RATIO PRINTS OF ABOVE AT 1:5000				
60 S 740A AND 742A	9-3-60	10:00	1:38,000	4.0' " "

TIDE (III)

		RATIO OF RANGES	MEAN RANGE	SPRING RANGE
REFERENCE STATION:	SAN DIEGO, CALIFORNIA		4.2	5.8
SUBORDINATE STATION:	POINT LOMA, CALIFORNIA		3.7	5.3
SUBORDINATE STATION:				
WASHINGTON OFFICE REVIEW BY (IV):		DATE:		
PROOF EDIT BY (IV):		DATE:		
NUMBER OF TRIANGULATION STATIONS SEARCHED FOR (II):	2	RECOVERED:	1	IDENTIFIED:
NUMBER OF BM(S) SEARCHED FOR (II):	SEE FIELD INSPEC. REPORT	RECOVERED:		IDENTIFIED:
NUMBER OF RECOVERABLE PHOTO STATIONS ESTABLISHED (III):		NONE		
NUMBER OF TEMPORARY PHOTO HYDRO STATIONS ESTABLISHED (III):		NONE		

REMARKS:

REMARKS:

## FIELD INSPECTION REPORT

MAP MANUSCRIPT T-11878

PROJECT 21033

REFER TO THE FIELD INSPECTION REPORT BY ROBERT B. MELBY FOR  
T-11878 THRU T-11881 DATED MARCH 1962 THRU MAY 1962 INCLUDED WITH  
THE DESCRIPTIVE REPORT FOR T-11879.

PHOTOGRAMMETRIC PLOT REPORT NO. I  
 PH-6011  
 Dana Point, Calif. to Mexican Border

April 1963

21. Area Covered

This report covers that portion of the project from Dana Point to Point Loma for 1:10,000 shoreline surveys T-11864 thru T-11878.

22. Method

Four strips were bridged, Nos. 1 thru 4. Strip No. 1 was run with the Zeiss Stereoplanigraph (C-8). The remaining three were bridged and adjusted by the method of analytic aerotriangulation. Closures to control are indicated on the aerotriangulation sketch, attached. Ties between strips were satisfactory. These were averaged and corrections were made to the IBM readouts.

23. Adequacy of Control

Horizontal control complied with project instructions and was adequate. The following control stations appearing in the bridge deserve special comment:

SAN DIEGO YACHT CLUB FLAGPOLE, 1933

Two substitute stations were established for this station (Strip No. 4). The bridging results indicated an error of approximately minus 95 feet in X and plus 65 feet in Y. Since the strip was well-controlled and the error so large, we concluded that there must be an error in position. The positions of the sub-points were rejected.

SAN DIEGO, U. S. NAVAL TRAINING STATION FLAGPOLE, 1933

The direct pricking for this station was used as a control in the adjustment. The comparison point, sub-point "A", checked poorly in the bridge (Strip No. 4). An evaluation of the point, at the time of drilling considered this point as indefinite. It should not be favored when the Kelsh models are set for compilation.

In addition to field-identified control, the following stations were office-identified and held well:

CARLEBAD, TWIN DOME, ROOSTER ON PEDestal, 1933  
OCEANSIDE, ROSICRUCIAN BUILDING DOME, FINAL, 1933  
POINT LOMA, FT. ROSECRANS, WATER TANK, 1956

Bridging results comply with National Standards of Map Accuracy  
for a scale of 1:10,000.

24. Supplemental Data

None

25. Photography

Photography was adequate with regard to coverage, overlap,  
and definition.

Respectfully submitted:

Henry P. Eichert

Approved by:

Everett H. Ramey, Chief  
Aerotriangulation Section

# AEROTRIANGULATION SKETCH

PH-6011  
DANA POINT, CALIFORNIA  
STRIPS 1, 2, 3, & 4

TEMPLE HILL, 1933  
(+3.8, +2.9) 60-5-533A

TOP, 1961  
(-0.3, -0.3)  
(+0.6, -2.5)



PRIMA RESET  
(+1.0, +1.4)  
(+6.4, +1.6)

BEACON #5, 1933  
(-1.0, -1.2)  
(-1.7, -0.1)

117°41'15"

DON, 1933  
STRIP #1 { (+0.4, +0.3)  
          (+0.3, -0.6)  
STRIP #2 { (+0.1, -0.3)  
          (+0.2, -0.3)

JUNCTION, 1933  
(-0.3, +0.1)  
(+1.3, -1.5)

SOUTH CHY. WH. HO. 2.0 MI.  
E. OF CARLSBAD, 1933  
(-1.0, -6.7)

OCEANSIDE ROSICRUCIAN  
BLD'G DOME FINIAL, 1933  
(+1.1, +1.0)

CARLSBAD TWIN INNS  
ROOSTER ON PEDESTAL, 1933  
(+0.4, -0.2)

POST, 1887  
STRIP #2 (0.0, 0.0), (+3.4, -6.7)  
STRIP #3 (1.1, +0.2), (+2.8, -11.1)

MULL, 1887  
(+2.2, +1.8), (-1.5, -3.6)

ENCITAS 2, 1933  
(+4.3, +7.2), (+2.1, -0.5)

- ### LEGEND
- ▲ CONTROL USED IN ADJUSTMENT
  - △ CONTROL USED AS A CHECK
  - ( ) CLOSURE OF BRIDGE TO CONTROL SHOWN IN PARENTHESIS

S.E. RANGE, U.S.N., 1932  
STRIP #3 (0.4, -3.1), (-1.1, -0.3)  
STRIP #4 (3.9, +0.4), (-0.9, +0.2)

SOLEDAD, 1887  
(+1.5, +0.8), (+0.5, +3.7)

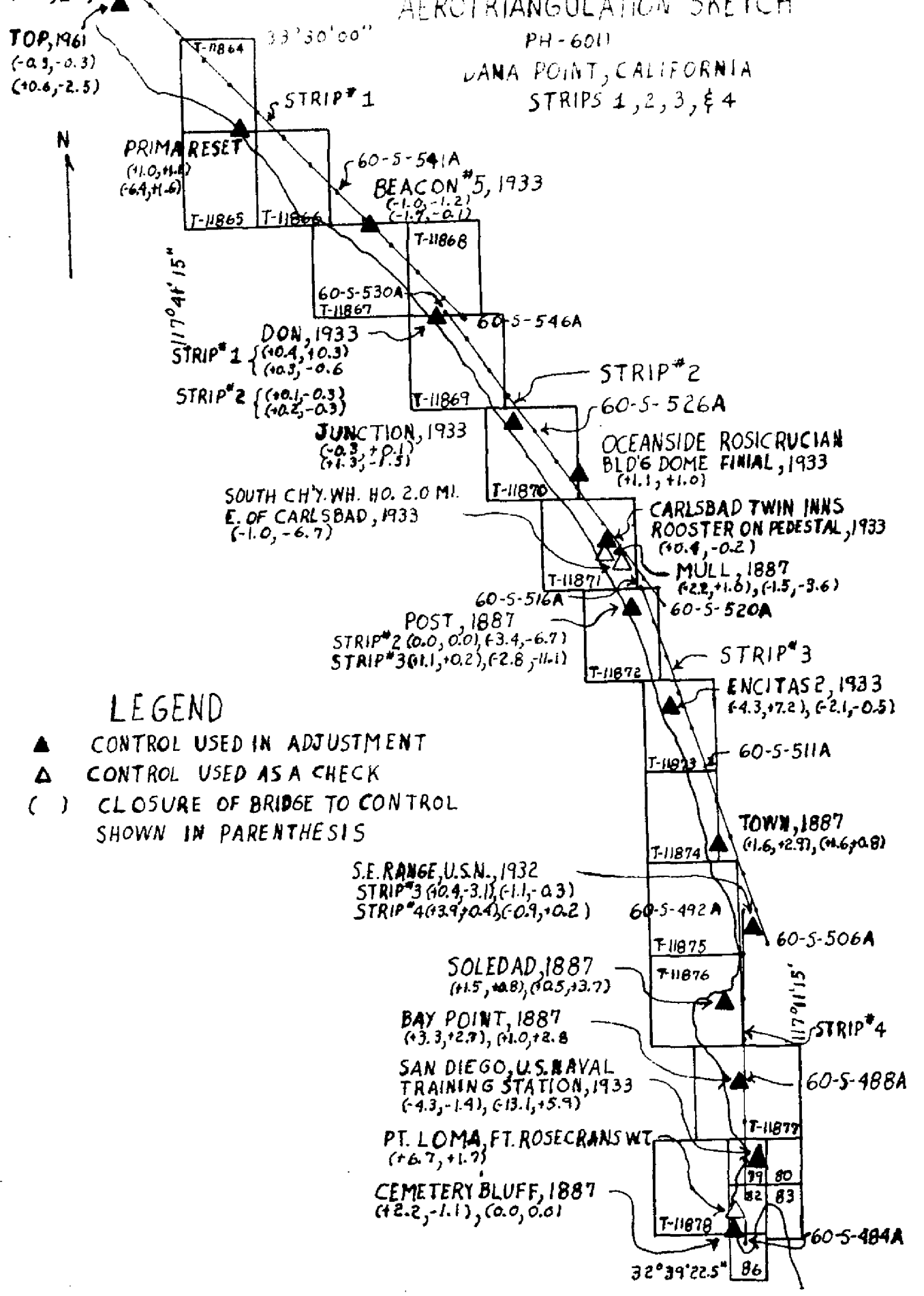
BAY POINT, 1887  
(+3.3, +2.7), (+1.0, +2.8)

SAN DIEGO, U.S. NAVAL  
TRAINING STATION, 1933  
(-4.3, -1.4), (+13.1, +5.9)

PT. LOMA, FT. ROSECRANS WT.  
(+6.7, +1.7)

CEMETERY BLUFF, 1887  
(+2.2, -1.1), (0.0, 0.0)

32°39'22.5"





COMPILATION REPORT  
MAP MANUSCRIPT T-11878  
PROJECT 21033

31. DELINEATION:

PLANIMETRY WAS COMPILED BY THE USE OF THE KELSH INSTRUMENT.

32. CONTROL:

ADEQUATE SUPPLEMENTARY CONTROL, BASED ON IDENTIFIED HORIZONTAL CONTROL STATIONS, WAS ESTABLISHED BY ANALYTIC AEROTRIANGULATION METHODS.

33. SUPPLEMENTAL DATA:

MASTER PLAN, CALIFORNIA WESTERN UNIVERSITY.

34. CONTOURS AND DRAINAGE:

CONTOURS ARE NOT APPLICABLE.

NO DRAINAGE WAS FIELD INSPECTED AND NONE WAS EVIDENT FROM STEREO-SCOPIC EXAMINATION OF THE PHOTOGRAPHY.

35. SHORELINE AND ALONGSHORE DETAILS:

THE MEAN HIGH WATER LINE WAS COMPILED AS FIELD INSPECTED. NO LOW WATER LINE WAS FIELD INSPECTED OR DELINEATED.

A ROCK LEDGE WAS DELINEATED ALONG MOST OF THE SHORELINE, IN ACCORDANCE WITH THE APPROXIMATE LIMITS OF THIS FEATURE FIELD INSPECTED. SEVERAL ROCKS WERE IDENTIFIED WITH HEIGHTS FURNISHED FOR THE TIME OF INSPECTION. THESE ROCKS WERE LOCATED WITH THEIR HEIGHTS ADJUSTED TO THE DATUM OF THE MANUSCRIPT.

36. OFFSHORE DETAILS:

NONE.

37. LANDMARKS AND AIDS:

NONE.

38. CONTROLS FOR FUTURE SURVEYS:

NONE.

39. JUNCTIONS:

SATISFACTORY JUNCTIONS WERE MADE WITH T-11877 TO THE NORTH AND WITH T-11879 TO THE EAST. THE PACIFIC OCEAN IS TO THE SOUTH AND WEST.

40. HORIZONTAL AND VERTICAL ACCURACY:46. COMPARISON WITH EXISTING MAPS:

COMPARISON WAS MADE WITH THE U.S.G.S. 7½ MINUTE POINT LOMA, CALIFORNIA QUADRANGLE, SCALE 1:24,000, EDITION 1953.

47. COMPARISON WITH NAUTICAL CHARTS:

COMPARISON WAS MADE WITH NAUTICAL CHART 5101, SCALE 1:234,270 AT LAT. 33° 20', 6TH EDITION OCT. 2, 1961, REVISED 9-24-62; WITH NAUTICAL CHART 5105, SCALE 1:12,000 AT LAT. 32° 42', 10TH EDITION FEB. 12, 1962 REVISED 2-11-63; AND WITH NAUTICAL CHART 5107, SCALE 1:20,000 AT LAT. 32° 40', 23RD EDITION NOV. 12, 1962.

APPROVED:

*for* *Leo F. Beugnot*  
P. A. STARK, CDR, C&GS  
PORTLAND FIELD OFFICER.

SUBMITTED:

*James L. Harris*  
JAMES L. HARRIS  
CARTOGRAPHER



48. GEOGRAPHIC NAME LIST:

THE GEOGRAPHIC NAMES SHOWN ON THIS MANUSCRIPT ARE LISTED BELOW AND WERE FURNISHED BY THE WASHINGTON OFFICE ON A FINAL NAME SHEET, A COPY OF THE U.S.G.S. POINT LOMA, CALIFORNIA 7½ MINUTE QUADRANGLE, SCALE 1:24,000, EDITION 1953.

ALLIGATOR ROCK  
AZURE VISTA  
OCEAN BEACH  
RIVIERA VILLAS  
SAN DIEGO  
SUNSET CLIFFS (COMMUNITY)  
SUNSET CLIFFS (FEATURE)

*Names approved*

*- 8 - 3 - 65*

*A. J. Wrought*

49. NOTES FOR THE HYDROGRAPHER:

NONE.

PHOTOGRAMMETRIC OFFICE REVIEW

T-10853 11878

1. PROJECTION AND GRIDS ✓		2. TITLE ✓		3. MANUSCRIPT NUMBERS ✓		4. MANUSCRIPT SIZE ✓	
CONTROL STATIONS							
5. HORIZONTAL CONTROL STATIONS OF THIRD-ORDER OR HIGHER ACCURACY ✓				6. RECOVERABLE HORIZONTAL STATIONS OF LESS THAN THIRD-ORDER ACCURACY (Topographic stations) None		7. PHOTO HYDRO STATIONS None	
8. BENCH MARKS None		9. PLOTTING OF SEXTANT FIXES None		10. PHOTOGRAMMETRIC PLOT REPORT ✓		11. DETAIL POINTS None	
ALONGSHORE AREAS (Nautical Chart Data)							
12. SHORELINE ✓		13. LOW-WATER LINE ✓		14. ROCKS, SHOALS, ETC. ✓		15. BRIDGES None	
16. AIDS TO NAVIGATION None		17. LANDMARKS None		18. OTHER ALONGSHORE PHYSICAL FEATURES ✓		19. OTHER ALONGSHORE CULTURAL FEATURES ✓	
PHYSICAL FEATURES							
20. WATER FEATURES ✓				21. NATURAL GROUND COVER ✓		22. PLANETABLE CONTOURS None	
23. STEREOSCOPIC INSTRUMENT CONTOURS None		24. CONTOURS IN GENERAL None		25. SPOT ELEVATIONS None		26. OTHER PHYSICAL FEATURES ✓	
CULTURAL FEATURES							
27. ROADS ✓		28. BUILDINGS ✓		29. RAILROADS None		30. OTHER CULTURAL FEATURES ✓	
BOUNDARIES							
31. BOUNDARY LINES ✓				32. PUBLIC LAND LINES ✓			
MISCELLANEOUS							
33. GEOGRAPHIC NAMES ✓				34. JUNCTIONS ✓		35. LEGIBILITY OF THE MANUSCRIPT ✓	
36. DISCREPANCY OVERLAY ✓		37. DESCRIPTIVE REPORT		38. FIELD INSPECTION PHOTOGRAPHS ✓		39. FORMS ✓	
40. REVIEWER James L. Harris				SUPERVISOR, REVIEW SECTION OR UNIT			
41. REMARKS (See attached sheet)							
FIELD COMPLETION ADDITIONS AND CORRECTIONS TO THE MANUSCRIPT							
42. Additions and corrections furnished by the field completion survey have been applied to the manuscript. The manuscript is now complete except as noted under item 43.							
COMPILER				SUPERVISOR			
43. REMARKS							

Review Report  
Shoreline Maps  
T-11878 through T-11883, 11892 and 11893  
September 1965

61. General Statement

Area - The project encompasses the California Coast from Dana Point to Mexico.

Purpose - The purpose of this project is to provide shoreline maps for our nautical and aeronautical charting program.

62. Comparison with Registered Topographic Maps

T-5371	1:10,000	1934
T-5372	1:10,000	1934
T-5373	1:10,000	1934
T-5374	1:10,000	1934

Cultural and shoreline changes have been continuous with extensive changes in the urban areas.

63. Comparison with Maps of Other Agencies

San Ysidro	1:24,000	1953
National City	1:24,000	1953
Point Loma	1:24,000	1953

Considering the time interval the maps are in comparatively close agreement.

64. Comparison with Contemporary Hydrographic Surveys

None

65. Comparison with Nautical Charts

5101	1:234,270	April 1965
5105	1:12,000	1962
5107	1:20,000	1964

There are differences in the San Diego harbor area, otherwise they are in comparatively good agreement.

66. Adequacy of Results and Future Surveys

These surveys were prepared according to project instructions, and comply with the National Standards of Map Accuracy.

Reviewed by:

  
L. C. Lande

Approved by:

  
Chief, Photogrammetric Branch

  
Chief, Photogrammetry Division

Chief, Nautical Chart Division



