

TP-00407

TP-00407

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. PH-7107 Map No. TP-00407
Classification No. Final Edition No. 1

LOCALITY

State California
General Locality .. Dana Point to Point Vicente
Locality Santa Ana River

1971 TO 1974

REGISTRY IN ARCHIVES

DATE

NOAA FORM 76-36A (3-72)		U. S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	
DESCRIPTIVE REPORT - DATA RECORD		TYPE OF SURVEY <input checked="" type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED	SURVEY TP. <u>00407</u> MAP EDITION NO. (1) MAP CLASS Final JOB PH. <u>7107</u>
PHOTOGRAMMETRIC OFFICE Coastal Mapping Division, Atlantic Marine Center, Norfolk, VA OFFICER-IN-CHARGE Jeffrey G. Carlen		LAST PRECEDING MAP EDITION TYPE OF SURVEY <input type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED JOB PH. _____ MAP CLASS _____ SURVEY DATES: 19__ TO 19__	
I. INSTRUCTIONS DATED			
1. OFFICE		2. FIELD	
Aerotriangulation August 19, 1971 Compilation Nov. 05, 1973 Supplement 1 Oct. 09, 1973 Amendment 1 Oct. 30, 1973 Amend. 1 to Supp. 1 Jan. 28, 1974		Premarking March 1, 1971 Premarking Supplement I February 25, 1972	
II. DATUMS			
1. HORIZONTAL: <input checked="" type="checkbox"/> 1927 NORTH AMERICAN		OTHER (Specify)	
2. VERTICAL: <input checked="" type="checkbox"/> MEAN HIGH-WATER <input type="checkbox"/> MEAN LOW-WATER <input checked="" type="checkbox"/> MEAN LOWER LOW-WATER <input type="checkbox"/> MEAN SEA LEVEL		OTHER (Specify)	
3. MAP PROJECTION Polyconic		4. GRID(S) STATE California ZONE 6	
5. SCALE 1:5,000		STATE ZONE	
III. HISTORY OF OFFICE OPERATIONS			
OPERATIONS	NAME	DATE	
1. AEROTRIANGULATION BY METHOD: Analytic LANDMARKS AND AIDS BY	D. Brant	Nov 1971	
2. CONTROL AND BRIDGE POINTS PLOTTED BY METHOD: Coradomat CHECKED BY	D. Phillips	Oct 1971	
	D. Phillips	Oct 1971	
3. STEREOSCOPIC INSTRUMENT PLANIMETRY BY COMPILATION CHECKED BY	A. L. Shands	Dec 1971	
INSTRUMENT: Wild B-8	L. O. Neterer	Dec 1971	
SCALE: 1:7,500	NA		
	NA		
4. MANUSCRIPT DELINEATION PLANIMETRY BY	T. J. Bulfer	Dec 1971	
	L. L. Graves	Dec 1971	
METHOD: Smooth drafted	NA		
	NA		
SCALE: 1:5,000 HYDRO SUPPORT DATA BY	T. J. Bulfer	Dec 1971	
	L. L. Graves	Dec 1971	
5. OFFICE INSPECTION PRIOR TO FIELD EDIT BY	L. L. Graves	Dec 1971	
6. APPLICATION OF FIELD EDIT DATA BY	I. K. Perkinson	Jul 1975	
	A. L. Shands	Nov 1975	
7. COMPILATION SECTION REVIEW BY	A. L. Shands	Nov 1975	
8. FINAL REVIEW BY	A. L. Shands	Aug 1978	
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH BY	A. L. Shands	Nov 1978	
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH BY	A. K. Heywood	Feb 1980	
11. MAP REGISTERED - COASTAL SURVEY SECTION BY	E. L. DAUGHERTY	JUN 1980	

NOAA FORM 76-36B
(3-72)U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEY

COMPILATION SOURCES

1. COMPILATION PHOTOGRAPHY

CAMERA(S) Wild Rc-8 "L"		TYPES OF PHOTOGRAPHY LEGEND		TIME REFERENCE	
TIDE STAGE REFERENCE		(C) COLOR (P) PANCHROMATIC (I) INFRARED		ZONE	<input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> DAYLIGHT
<input checked="" type="checkbox"/> PREDICTED TIDES <input type="checkbox"/> REFERENCE STATION RECORDS <input checked="" type="checkbox"/> TIDE CONTROLLED PHOTOGRAPHY				Pacific	
				MERIDIAN	
				120th	
NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE	
71L(C) 1601	3/5/71	13:05	1:15,000	+0.0 above MLLW	
71L(I) 1981	3/6/71	14:55	1:15,000	-0.2 ft. of MLLW	

REMARKS

2. SOURCE OF MEAN HIGH-WATER LINE:

The MHWL was compiled from office interpretation of the above listed photography.

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

*The MLLWL was compiled from the above tide coordinated photography.

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
No Survey	TP-00408	TP-00409	TP-00406

REMARKS

NOAA FORM 76-36C
(3-72)U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEY

HISTORY OF FIELD OPERATIONS

I. ☒ FIELD INSPECTION OPERATION☐ FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	R. B. Melby	Feb/Mar '71
2. HORIZONTAL CONTROL	RECOVERED BY R. B. Melby	Feb/Mar '71
	ESTABLISHED BY None	
	PRE-MARKED OR IDENTIFIED BY L. L. Riggers	Feb 1971
3. VERTICAL CONTROL	RECOVERED BY None	
	ESTABLISHED BY None	
	PRE-MARKED OR IDENTIFIED BY None	
4. LANDMARKS AND AIDS TO NAVIGATION	RECOVERED (Triangulation Stations) BY None	
	LOCATED (Field Methods) BY None	
	IDENTIFIED BY None	
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION	
	<input type="checkbox"/> COMPLETE BY	
	<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

None

PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION
71L 1666	AERATOR, 1932		

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)

1-Form 152

HISTORY OF FIELD OPERATIONS

I. ☐ FIELD INSPECTION OPERATION☒ FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	CDR C. A. Burroughs	Oct 1974
2. HORIZONTAL CONTROL	RECOVERED BY FAIRWEATHER Personnel	Oct 1974
	ESTABLISHED BY FAIRWEATHER Personnel	Oct 1974
	PRE-MARKED OR IDENTIFIED BY None	
3. VERTICAL CONTROL	RECOVERED BY None	
	ESTABLISHED BY None	
	PRE-MARKED OR IDENTIFIED BY None	
4. LANDMARKS AND AIDS TO NAVIGATION	RECOVERED (Triangulation Stations) BY None	
	LOCATED (Field Methods) BY None	
	IDENTIFIED BY None	
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION <input type="checkbox"/> COMPLETE BY <input type="checkbox"/> SPECIFIC NAMES ONLY <input checked="" type="checkbox"/> NO INVESTIGATION	
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY LCDR J. A. Sowers	Oct 1974
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY NA	

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED

None

2. VERTICAL CONTROL IDENTIFIED

None

PHOTO NUMBER	STATION NAME	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 ☒ 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)

Map TP-00407 (Field Edit copy); and Field edit report,
OPR-411-Fa-74, Map TP-00407

RECORD OF SURVEY USE

I. MANUSCRIPT COPIES

COMPILATION STAGES			DATE MANUSCRIPT FORWARDED	
DATA COMPILED	DATE	REMARKS	MARINE CHARTS	HYDRO SUPPORT
Complete complete, pending field edit	12/23/71	Class III Manuscript	None	1/5/72
Field edit applied. Compilation complete	07/08/75	Class I manuscript	6/7/76	
Final Review	Aug 1978	Final	Nov 1978	

II. LANDMARKS AND AIDS TO NAVIGATION None

1. REPORTS TO MARINE CHART DIVISION, NAUTICAL DATA BRANCH

NUMBER	CHART LETTER NUMBER ASSIGNED	DATE FORWARDED	REMARKS
			None

2. ☐ REPORT TO MARINE CHART DIVISION, COAST PILOT BRANCH. DATE FORWARDED: _____3. ☐ REPORT TO AERONAUTICAL CHART DIVISION, AERONAUTICAL DATA SECTION. DATE FORWARDED: _____

III. FEDERAL RECORDS CENTER DATA

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

4. ☐ DATA TO FEDERAL RECORDS CENTER. DATE FORWARDED: _____

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

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

[illegible]

SUMMARY TO ACCOMPANY

TP-00404 through TP-00415

Maps included in this summary comprise roughly the southern half of Project PH-7107. Maps TP-00406 through TP-00411 are 1:5,000 scale. TP-00404, TP-00405 and TP-00412 through TP-00415 are 1:10,000 scale.

These maps cover the mainland coast of California from Dana Point northward to Huntington Beach. Each map is a standard shoreline map the purpose, of which, is to provide shoreline in support of contemporary hydrographic operations and for nautical chart construction.

The shoreline is composed primarily of sand. Large amounts are deposited from runoff during the winter and spring rains. Much of the sand is then eroded during the dry months. This cycle of erosion and deposition causes the shoreline to meander in and out. As a result, the mean high water line throughout the entire area is constantly changing.

Field operations prior to compilation consisted of the recovery and identification of horizontal control used in the bridge and leveling operations used to establish the mean lower low water datum in connection with the tide coordinated infrared photography.

The job was bridged in two parts. Bridging for this part of the job was done at the Rockville Office in November, 1971. All ratios were determined and photographs were ordered at that time.

All maps were compiled at the Atlantic Marine Center in January and February, 1972. Field edit was accomplished in October, 1974.

Field edit application and Final Review was performed at the Atlantic Marine Center. All pertinent data was forwarded to the Rockville Office for reproduction and final registration.

Field Report
Project PH-7107
Dana Point to Point Vicente, California
Shoreline Mapping
February - March 1971

The field work pertaining to this project consisted of premarking horizontal control stations prior to aerial photography and furnishing tidal observations necessary for tide control photography.

Horizontal Control:

The horizontal control requirements consisted of paneling preselected triangulation stations. The panels were the conventional, white, opaque polyethylene plastic, cut to the specifications as required for 1:30,000 scale photography.

Form 152, Control Station Identification cards will be submitted for each station paneled. All of the panels are in open areas and shadows or cliffs should not be a problem. Panel array No. 1 was used exclusively, although in some instances, the length or position of the rays were altered to conform to the existing terrain.

Tide Observations:

At Newport Bay, three existing tidal bench marks were tied by spirit levels to the stop on the portable tide staff, of the operating tide gage. The values agreed favorably with the results as determined by a party from the San Francisco Field Office on 2 February 1971. Staff reading of 3.18 feet equals 0.00 feet mean lower low water.

The staff was read at least one hour prior to, during, and one hour after the anticipated or actual aerial photography. The readings were at five minute intervals to the nearest 0.05 foot. The air photo mission was informed by radio of the tide staff readings, during the overflights. The field level observations are recorded in Form 258, "Leveling Record - Tide Station".

A bubbler tide gage was installed on the Oceanside Pier, Oceanside, California, 1 March 1971 to provide tidal data for the proposed tide-controlled photography, scheduled for October 1971.

Respectfully Submitted,

Robert B. Melby

Robert B. Melby
Chief, PMC Field Party

PHOTOGRAMMETRIC PLOT REPORT

Part 1

Dana Point to Point Vicente

California

Job PH-7107

November 1971

21. Area Covered

The area covered by this report is along the west coast of California. Control was extended for the shoreline compilation of the following maps:

1:5,000 scale1:10,000 scale

TP-00406
TP-00407
TP-00408
TP-00409
TP-00410
TP-00411

TP-00404
TP-00405
TP-00412
TP-00413
TP-00414
TP-00415

22. Method

Strip #1 (1:30,000 scale photography) was bridged using analytical aerotriangulation methods. Sketch #1 shows the flight line of the photography and the placement of the control used in the adjustment. Compilation points were located between Strip #1 and Strips #2, #3 and #4 (1:15,000 scale photography) to control the 1:5,000 scale compilation. Compilation points were also located between Strip #1 and Strip #5 (1:30,000 scale photography) where coverage from Strip #1 was not sufficient to control the 1:10,000 scale compilation. Sketch #2 shows the flight lines of the photography. Common points were located between Strip #1 and the 1:15,000 scale and 1:20,000 scale photography in order to determine the ratio scale for the hydro support photography. Natural objects such as tanks, stacks, etc. were located for hydro support parties during bridging. All data for ruling projections and plotting points for the compilation office were furnished to the Coradomat to be plotted on the California zone 6 coordinate system.

23. Adequacy of Control

Horizontal control was premarked and was adequate for bridging.

2

24. Supplemental Data

USGS quadrangles were used to provide vertical control for the adjustment.

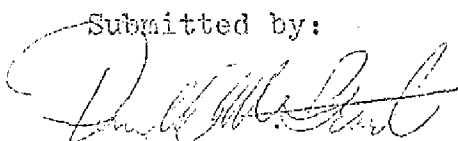
25. Photography

The following 1:30,000 scale RC-8 color photography was used in bridging Strip #1:

71-L(C)-1653 thru 1674


The definition and quality of photography was adequate.

Submitted by:



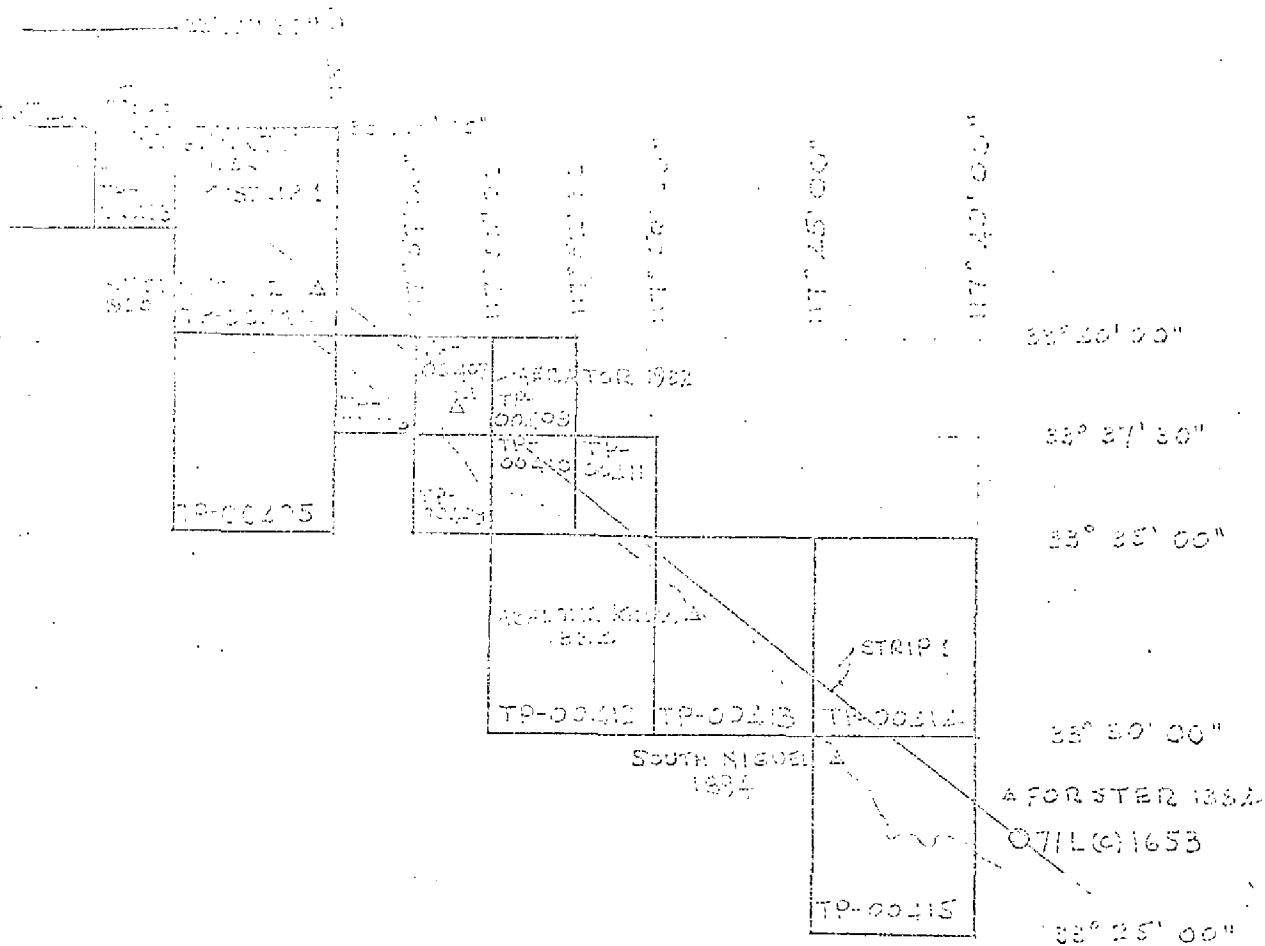
Donald M. Brant

Approved by:



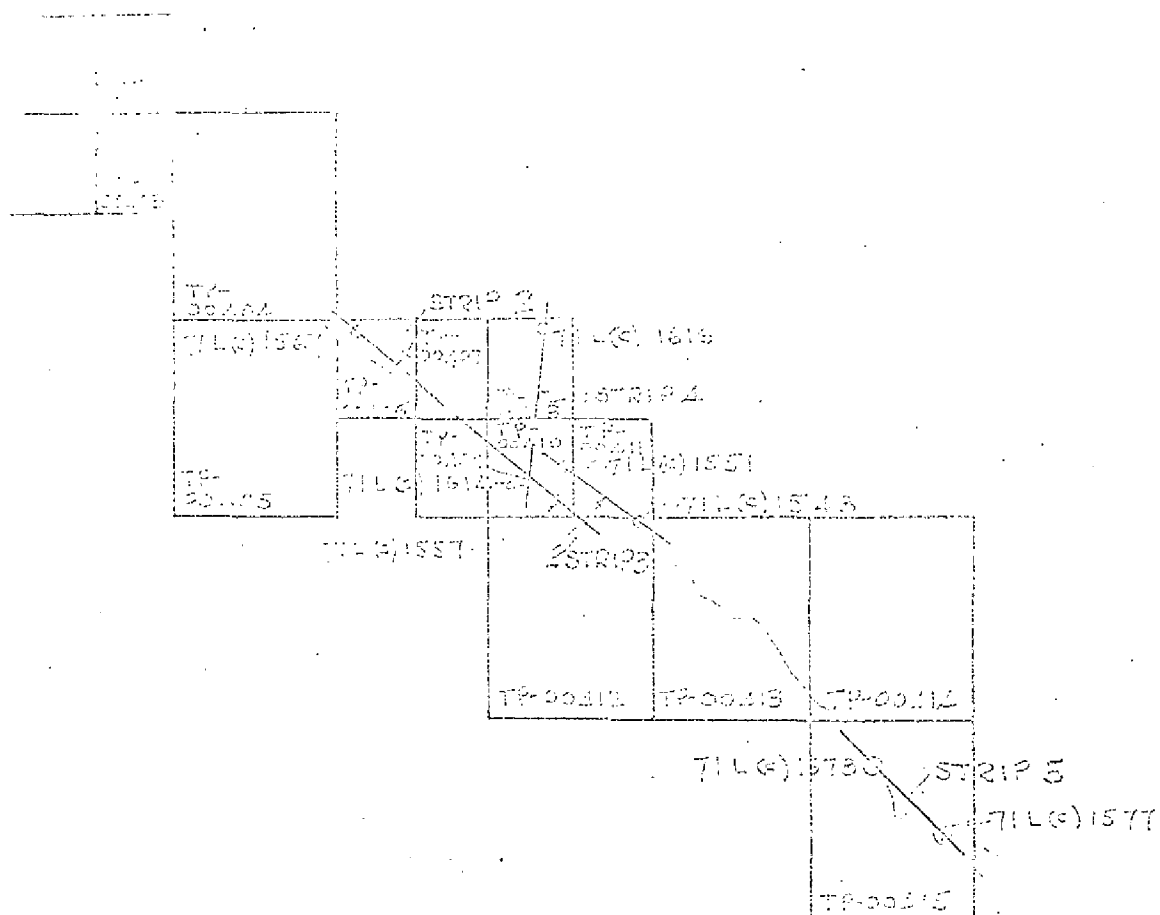
Henry E. Eichert, Chief
Aerotriangulation Section

Sketch #1 8c

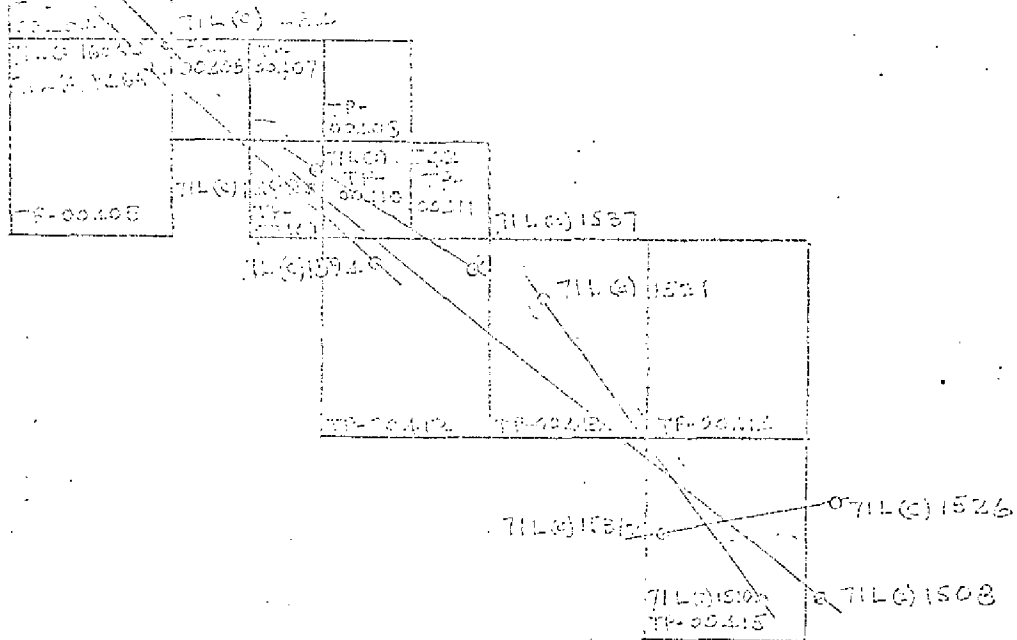


A CONTROL USED IN ADJUSTMENT
 @ 1:30,000 SCALE PHOTOGRAPHY

JOB PH - 7107
 DANA POINT TO POINT VICENTE
 CALIFORNIA
 SHORELINE MAPPING
 SCALE 1:10,000 & 1:15,000



0 p 15,000 PHOTOGRAPHY
0 p 50,000 PHOTOGRAPHY



0 115,000 SCALE HYDRO SUPPORT PHOTOGRAPHY
 0 115,000 SCALE HYDRO SUPPORT PHOTOGRAPHY

COMPILATION REPORT

SHORELINE

TP-00407

31. DELINEATION:

The Wild B-8 plotter was used. Photograph coverage was adequate. There was no field inspection prior to compilation.

32. CONTROL:

See Photogrammetric Plot Report, Part 1, dated November 1971.

33. SUPPLEMENTAL DATA:

None.

34. CONTOURS AND DRAINAGE:

Contours are inapplicable. Drainage has been shown from office interpretation of the photographs.

35. SHORELINE AND ALONGSHORE DETAILS:

The mean high water line and foreshore area were delineated from office interpretation of the photographs.

The low water line was taken from infrared photography flown at mean lower low water.

36. OFFSHORE DETAILS:

None.

37. LANDMARKS AND AIDS:

None.

38. CONTROL FOR FUTURE SURVEYS:

No statement.

39. JUNCTIONS:

See form 76-36b.

40. HORIZONTAL AND VERTICAL ACCURACY:

No statement.

46. COMPARISON WITH EXISTING MAPS:

Comparison was made with USGS Quadrangle
Newport Beach, California, scale 1:24,000, dated
1965.

47. COMPARISON WITH NAUTICAL CHARTS:

Comparison was made with Chart No. 5142,
scale 1:80,000, 9th edition, dated April 17, 1971.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY:

None.

ITEMS TO BE CARRIED FORWARD:

None.

Submitted by:

Albert C. Rauck, Jr. For
T. J. Bulfer
Cartographer
Dec. 27, 1971

Approved:

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

June 16, 1978

GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-7107, Dana Point to Point Vicente, California

TP-00407

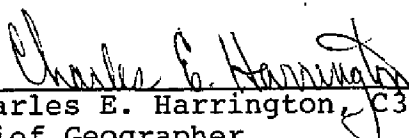
Greenville Banning Channel

Pacific Ocean

Santa Ana River

Talbert Channel

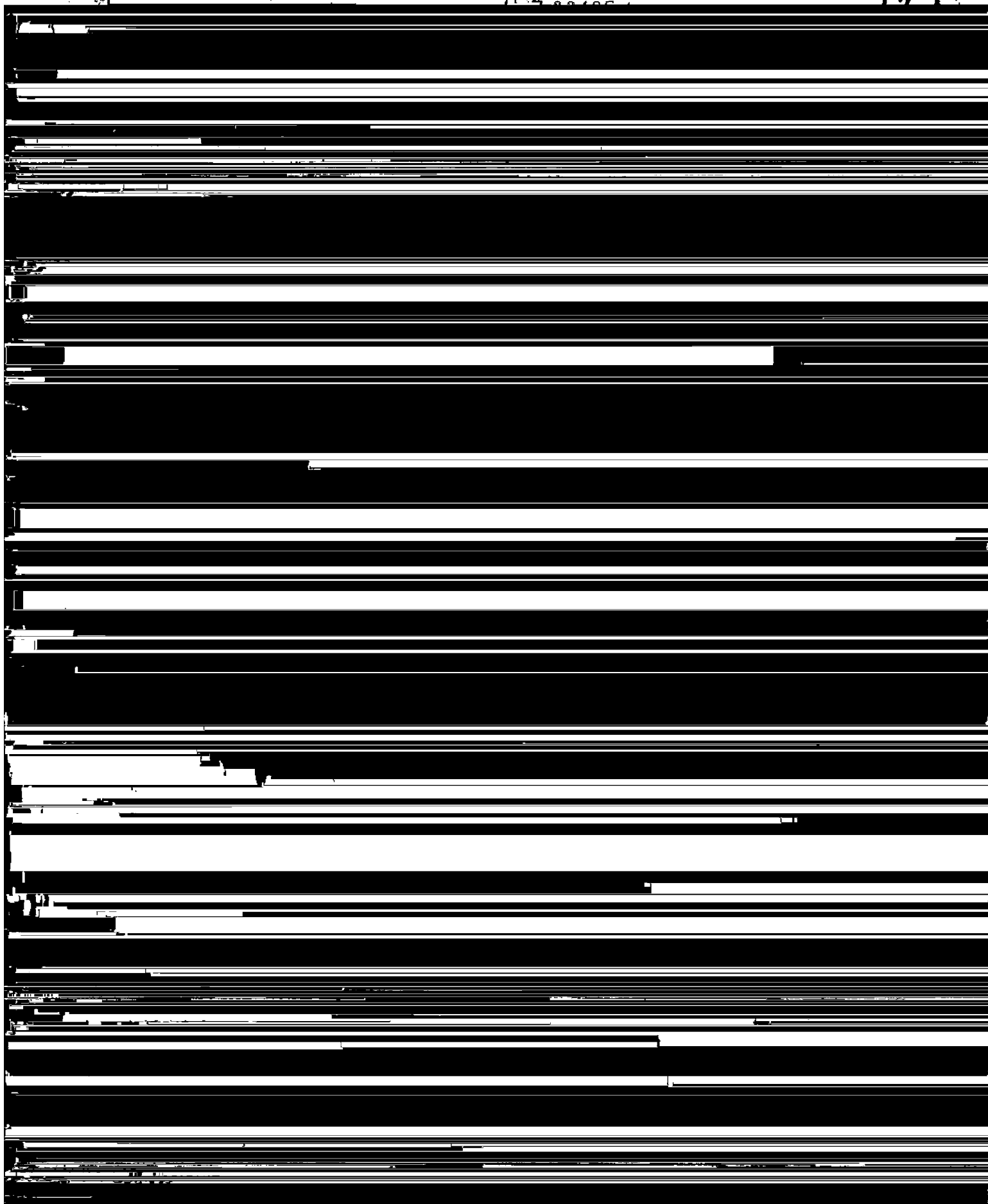
Approved by:


Charles E. Harrington, C3x8
Chief Geographer

PHOTOGRAMMETRIC OFFICE REVIEW

TP-7-88-105

12



FIELD EDIT REPORT

MAP TP-00407

SANTA ANNA RIVER, CALIFORNIA

OCTOBER 1974

Field edit of map TP-00407 was done by Lcdr Joseph A. Sowers and Ltjg Andrew M. Snella during October 1974. Field inspection of the area was done at various stages of the tide by land vehicle.

METHOD

Photographs and a copy of the field edit ozalid were examined in the field. Photogrammetric techniques were used for location of features in question. The shore was virtually straight, regular sandy beach and the foreshore area was unfouled, requiring no verification of the existence of rocks, reefs, etc. All times are based on GMT.

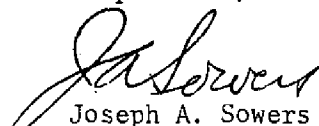
ADEQUACY OF COMPILATION

Compilation of this map is good. The hydrography for this area has not yet been run. Field inspection of this map is complete.

RECOMMENDATIONS

It is recommended that this map be revised in accordance with the notes and fix information on the ozalid and photographs, and then be accepted as an advanced manuscript.

Respectfully submitted:


Joseph A. Sowers
LCDR, NOAA

REVIEW REPORT
TP-00407

SHORELINE

August 4, 1978

61. GENERAL STATEMENT:

See Summary, page 6 of this Descriptive Report.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS:

No comparison was made.

63. COMPARISON WITH MAPS OF OTHER AGENCIES:

No comparison was made.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:

Comparison was made with a copy of Final Verified Smooth Sheet H-9487 (FA-10-4A&B-74-75). There are no differences between common details.

65. COMPARISON WITH NAUTICAL CHARTS:

Comparison was made with Chart 18746, 1:80,000 scale, 17th edition, dated March 19, 1977. The radio tower, (Ldmk., approximate position) charted at lat. 33° 38.0', long. 117° 56.2' is not visible on the photography used to compile this map.

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS:

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

Submitted by:

A. L. Shands

A. L. Shands
Final Reviewer

Approved for forwarding:

Billy H. Barn

for Chief, Photogrammetric Branch, AMC

Approved:

Chief, Photogrammetric Branch

[Signature] *for*
Chief, Coastal Mapping Division

