

TP-00402

TP-00402

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-00402
Classification No. Final Edition No. 1

Field Edited Map

LOCALITY

State California
General Locality Dana Point to Point Vicente
Locality Long Beach Breakwater

1972 TO 1975

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	
PHOTOGRAMMETRIC OFFICE Coastal Mapping Division Norfolk, Va.		SURVEY TP-00402 MAP EDITION NO. (1) MAP CLASS Final 7107 JOB PH-	
OFFICER-IN-CHARGE Jeffrey G. Carlen, CDR		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 Aug 17, 1971 Compilation Nov. 5, 1971 Supplement 1 Oct. 9, 1973 Amendment 1 Oct. 30, 1973 Amend. lto Supp. 1 Jan. 28, 1974		Premarking March 1, 1971 Premarking Supplement I Feb. 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		I. D. Raborn	Sep 1973
2. CONTROL AND BRIDGE POINTS PLOTTED BY METHOD: Coradomat CHECKED BY		Allen	Sep 1973
3. STEREOSCOPIC INSTRUMENT PLANIMETRY BY COMPILATION CHECKED BY		NA	
INSTRUMENT: Wild B-8 SCALE: 1:7,500 CONTOURS BY		NA	
4. MANUSCRIPT DELINEATION PLANIMETRY BY METHOD: Smooth Drafted CHECKED BY		C. Blood	Jul 1974
SCALE: 1:5,000 HYDRO SUPPORT DATA BY CHECKED BY		F. Margiotta	Jul 1974
5. OFFICE INSPECTION PRIOR TO FIELD EDIT BY		F. Margiotta	Jul 1974
6. APPLICATION OF FIELD EDIT DATA BY		D. Butler	Jul 1975
7. COMPILATION SECTION REVIEW BY		R. Minton	May 1976
8. FINAL REVIEW BY		A. Shands	Aug 1978
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH BY		A. 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

1. COMPILATION PHOTOGRAPHY

CAMERA(S) Wild RC-8"L"		TYPES OF PHOTOGRAPHY LEGEND (C) COLOR (P) PANCHROMATIC (I) INFRARED		TIME REFERENCE ZONE Pacific MERIDIAN 120th	
TIDE STAGE REFERENCE <input checked="" type="checkbox"/> PREDICTED TIDES <input type="checkbox"/> REFERENCE STATION RECORDS <input checked="" type="checkbox"/> TIDE CONTROLLED PHOTOGRAPHY				<input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> DAYLIGHT	
NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE	
72L(C) 3144	3/24/72	09:59	1:15,000	3.5 ft. above MLLW	
72L(C) 3023-3027	3/24/72	08:30	1:15,000	4.8 ft. above MLLW	
72L(I) 2837	3/24/72	11:37	1:15,000	±0.2 ft. of MLLW	

REMARKS

2. SOURCE OF MEAN HIGH-WATER LINE:

The mean high water line was compiled from the above listed photographs.

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

The mean lower low water line was delineated from the above listed tide coordinated infrared 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
TP-00395	TP-00401	No survey	TP00403

REMARKS

TP-00402
HISTORY OF FIELD OPERATIONSI. ☒ FIELD INSPECTION OPERATION☐ FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	R. B. Melby	MAr 1972
2. HORIZONTAL CONTROL	RECOVERED BY R. B. Melby	Mar 1972
	ESTABLISHED BY None	
	PRE-MARKED OR IDENTIFIED BY None	
3. VERTICAL CONTROL	RECOVERED BY NA	
	ESTABLISHED BY NA	
	PRE-MARKED OR IDENTIFIED BY NA	
4. LANDMARKS AND AIDS TO NAVIGATION	RECOVERED (Triangulation Stations) BY None	
	LOCATED (Field Methods) BY None	
	IDENTIFIED BY None	
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION <input type="checkbox"/> COMPLETE <input type="checkbox"/> SPECIFIC NAMES ONLY BY <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

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)

None

TP-00402

HISTORY OF FIELD OPERATIONS

I. <input type="checkbox"/> FIELD INSPECTION OPERATION			<input checked="" type="checkbox"/> FIELD EDIT OPERATION		
OPERATION		NAME		DATE	
1. CHIEF OF FIELD PARTY		M. Fleming, CDR. Davidson		Apr 1975	
2. HORIZONTAL CONTROL		RECOVERED BY ESTABLISHED BY PRE-MARKED OR IDENTIFIED BY		None None None	
3. VERTICAL CONTROL		RECOVERED BY ESTABLISHED BY PRE-MARKED OR IDENTIFIED BY		None None None	
4. LANDMARKS AND AIDS TO NAVIGATION		RECOVERED (Triangulation Stations) BY LOCATED (Field Methods) BY IDENTIFIED BY		M. Fleming M. Fleming None	
5. GEOGRAPHIC NAMES INVESTIGATION		TYPE OF INVESTIGATION <input type="checkbox"/> COMPLETE <input type="checkbox"/> SPECIFIC NAMES ONLY <input checked="" type="checkbox"/> NO INVESTIGATION		BY	
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			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: <input type="checkbox"/> REPORT <input checked="" type="checkbox"/> NONE			6. BOUNDARY AND LIMITS: <input type="checkbox"/> REPORT <input checked="" type="checkbox"/> NONE		
7. SUPPLEMENTAL MAPS AND PLANS					
None					
8. OTHER FIELD RECORDS (Sketch books, etc. DO NOT list data submitted to the Geodesy Division)					
Field edit ozalid and Field Edit Report					
List of "Abstract of Fix Geographic Positions"					

HISTORY OF FIELD OPERATIONS

I. ☐ FIELD INSPECTION OPERATION☒ FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	CDR R. E. Alderman, NOAA	Mar 1976
2. HORIZONTAL CONTROL	RECOVERED BY LTJG Kosinski, ENS Leigh	Mar 1976
	ESTABLISHED BY None	
	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 LTJG Kosinski, ENS Leigh	Mar 1976
	IDENTIFIED BY None	
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION <input type="checkbox"/> COMPLETE <input type="checkbox"/> SPECIFIC NAMES ONLY BY <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

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)

Horizontal Control Report, OPR-411-FA-1976; Field Edit Ozalid TP-00402
Field Edit Reports, OPR-411-FA-1976

NOAA FORM 76-36D
(3-72)

TP-00402

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

RECORD OF SURVEY USE

I. MANUSCRIPT COPIES

COMPILATION STAGES			DATE MANUSCRIPT FORWARDED	
DATA COMPILED	DATE	REMARKS	MARINE CHARTS	HYDRO SUPPORT
Compilation complete pending field edit	Jul 1974	Class III manuscript	8/2/74	8/2/74
Field edit applied. Compilation complete.	Jul 1975	Class I manuscript	6/7/76	
Final Review	Aug 1978	Final	Nov 1978	

II. LANDMARKS AND AIDS TO NAVIGATION

1. REPORTS TO MARINE CHART DIVISION, NAUTICAL DATA BRANCH

NUMBER	CHART LETTER NUMBER ASSIGNED	DATE FORWARDED	REMARKS
2		5/24/76	Aids to be charted

2. ☐ REPORT TO MARINE CHART DIVISION, COAST PILOT BRANCH. DATE FORWARDED: May 24, 1976
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 ⁷⁶⁻⁴⁰ ~~55X~~ 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	



LORAN LINEAR INTERPOLATOR

SOUNDINGS IN FATHOMS
AT MEAN LOWER LOW WATER

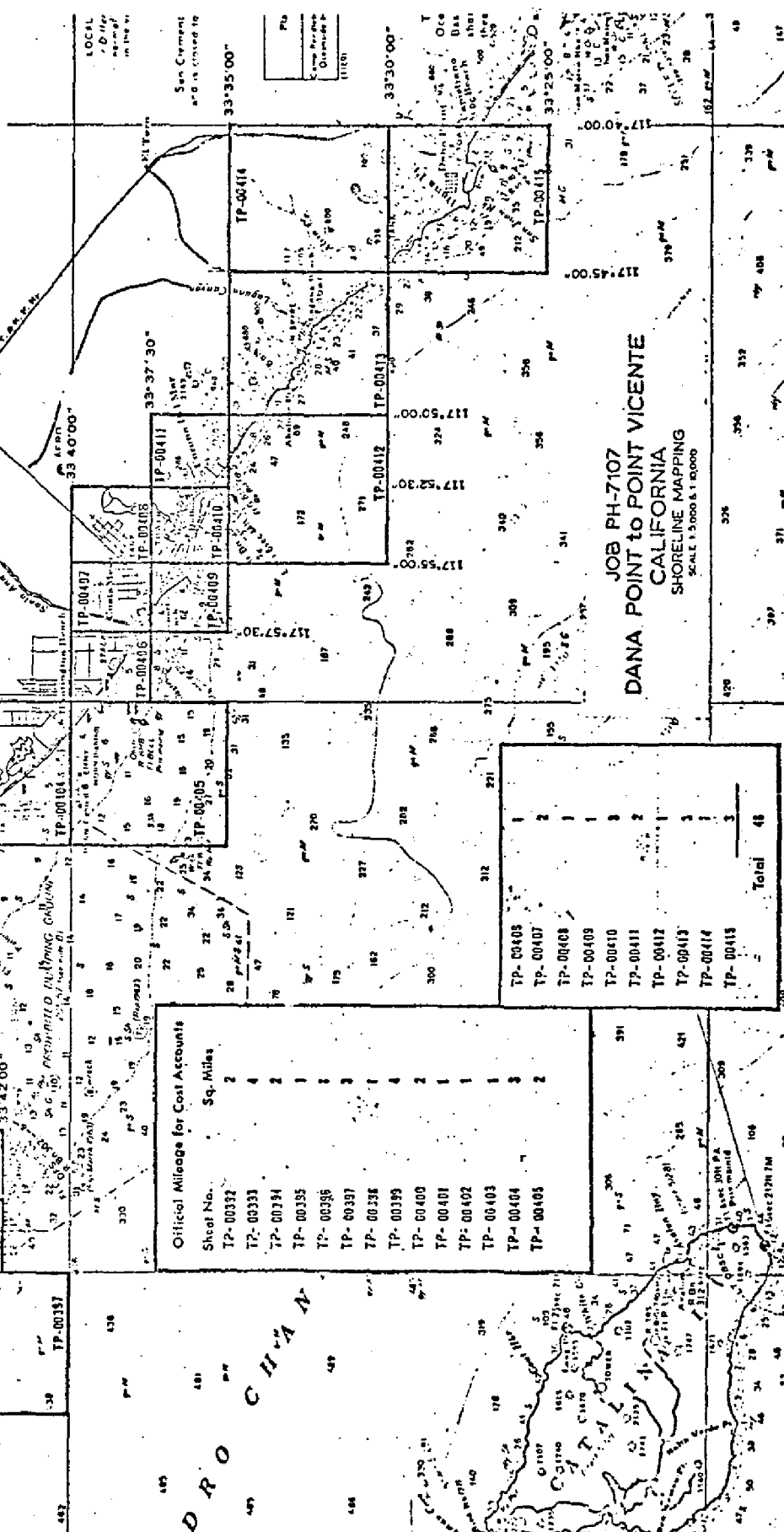
NOTE B

Navigation regulations are published in Chapter 2, Coast Pilot 7, or subsequent yearly supplements and Amendments. Notices to Mariners, Copies of the regulations may be obtained at the office of the District Engineer, Corps of Engineers in Los Angeles, Calif. :
Anchorage Regulations may be obtained at the office of the Commander, 11th Coast Guard District, 2 Beach, Calif.
Refer to section numbers shown with area designation.

NOTE C

SUBMARINE TRANSIT LINES
Times of submarine transit will be published in the Eleventh Coast Guard District (San Diego, California) Local Notice to Mariners. Sights and Calls are requested to tow submerged objects across transit lanes in use.

CAUTION
Temporary changes in depths or other data are indicated by a red letter in the text.



JOB PH-7107
DANA POINT TO POINT VICENTE
CALIFORNIA
SHORELINE MAPPING
SCALE 1:5000 & 1:10000

Official Mileage for Cost Accounts

Sheet No.	Sq. Miles
TP-00332	2
TP-00333	4
TP-00334	2
TP-00335	1
TP-00336	1
TP-00337	3
TP-00338	1
TP-00339	4
TP-00400	2
TP-00401	1
TP-00402	1
TP-00403	1
TP-00404	3
TP-00405	2

TP-00405	1
TP-00407	2
TP-00408	1
TP-00409	1
TP-00410	3
TP-00411	2
TP-00412	1
TP-00413	3
TP-00414	1
TP-00415	3
Total	48

SUMMARY TO ACCOMPANY

TP-00392 through TP-00403

Maps included in this summary comprise the northern portion of Project PH-7107. Each of them is 1:5,000 scale with the exception of TP-00392¹ which is 1:10,000 scale. They cover the coast of California from Anaheim Bay to Point Vicente. Each is a standard shoreline map, the purpose of which is to serve as support for contemporary hydrographic operations conducted in the area and to provide up-to-date shoreline for nautical chart construction.

The area is heavily populated with an accompanying high incidence of marine construction. Several major changes have occurred along the shoreline during the life of this survey due to construction.

Field operations prior to delineation consisted of the recovery and identification of horizontal control used for bridging and, also, leveling operations conducted in connection with the tide coordinated infrared photography which was used to delineate the mean lower low water line.

Bridging was done in the Rockville Office by analytic triangulation methods in September, 1973. Ratios were determined and ordered at that time.

Compilation was by Wild B-8 instrument method at the Atlantic Marine Center. Field edit was performed during the spring of 1975 and 1976. Edit data was applied to the maps at the Atlantic Marine Center.

Final Review was performed at the Atlantic Marine Center during the fall of 1978. The original base maps and all pertinent data was forwarded to the Rockville Office for reproduction and final registration.

FIELD INSPECTION

Field work prior to compilation was limited to the recovery and identification of horizontal and vertical control for use in the bridge and coordination of mean lower low water tide elevation. There was no clarification of photographic details.

PHOTOGRAMMETRIC PLOT REPORT

Part 2

Dana Point to Point Vicente

California

Job PH-7107

September 1973

21. AREA COVERED

The area covered by this report is along the west coast of California. This area is covered by one 1:10,000 scale sheet TP-00397 and eleven 1:5,000 scale sheets TP-00392 thru TP-00396 and TP-00398 thru TP-00403.

22. METHOD

Two strips of 1:30,000 scale color photography were bridged by analytic aerotriangulation methods. Sketch #1 shows the flight line of the photography and the placement of the control used in this adjustment. The two strips were controlled by field identified control paneled in 1972. Old control, which was office identified, was floated for checks. Ties were made between strips five and six. Strip number five was adjusted using 3 horizontal stations as control with one old station as a check. Strip number six was adjusted using 7 horizontal stations as control with 3 old stations as checks. Compilation points were located between strips #5 and #6 (1:30,000 scale photography) to control the 1:15,000 scale compilation photography, strips 10, 14, 15, 19, 20, and 21. Common points were located between strip 5 and 6 and the hydro support photography (1:15,000), strips 29 and 30, to determine the ratio scale. Sketch #2 shows the flight lines of the compilation and hydro support photography. Common points were located between strip 6 and strips 11 and 12 to determine only the ratio scale.

Difficulty in adjusting the strips occurred in the area of Long Beach Red Band Steel Tank, 1920. Points in this area approached the limits for National Map Accuracy Standards. This is the result of trying to obtain 1:5,000 scale sheets from 1:30,000 scale photography with several models being very weak. (Less than 1/2 model) The lower altitude strips were not bridged because the points for bridging would only be as good as the high altitude bridges. No difficulty is expected in detailing the compilation (1:15,000 scale models) however, if difficulty is encountered in the weak area, there are numerous office identifiable stations which could be used to help set up the models.

One model (Photos 72L2894, 72L2895) was set in the E-8. The four compilation points were held. Two triangulation stations and one substation were used as checks. All three held within 0.1 mm.

Data for ruling projections were furnished to the Coradomat to be plotted on the California zones 6 and 7 coordinate system.

23. ADEQUACY OF CONTROL

The control was adequate.

24. SUPPLEMENTAL DATA

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

25. PHOTOGRAPHY

The photography was adequate as to coverage, overlap and definition.

Respectfully submitted,

Ivey O. Raborn
Ivey O. Raborn

Approved and forwarded:

John D. Perrow, Jr.
John D. Perrow, Jr.
Chief, Aerotriangulation Section

NOTES TO COMPILER

Strip number 13, which covers the breakwater, cannot be controlled or set in stereo instruments. This area must be compiled by field methods.

PHOTOGRAMMETRIC PLOT REPORT

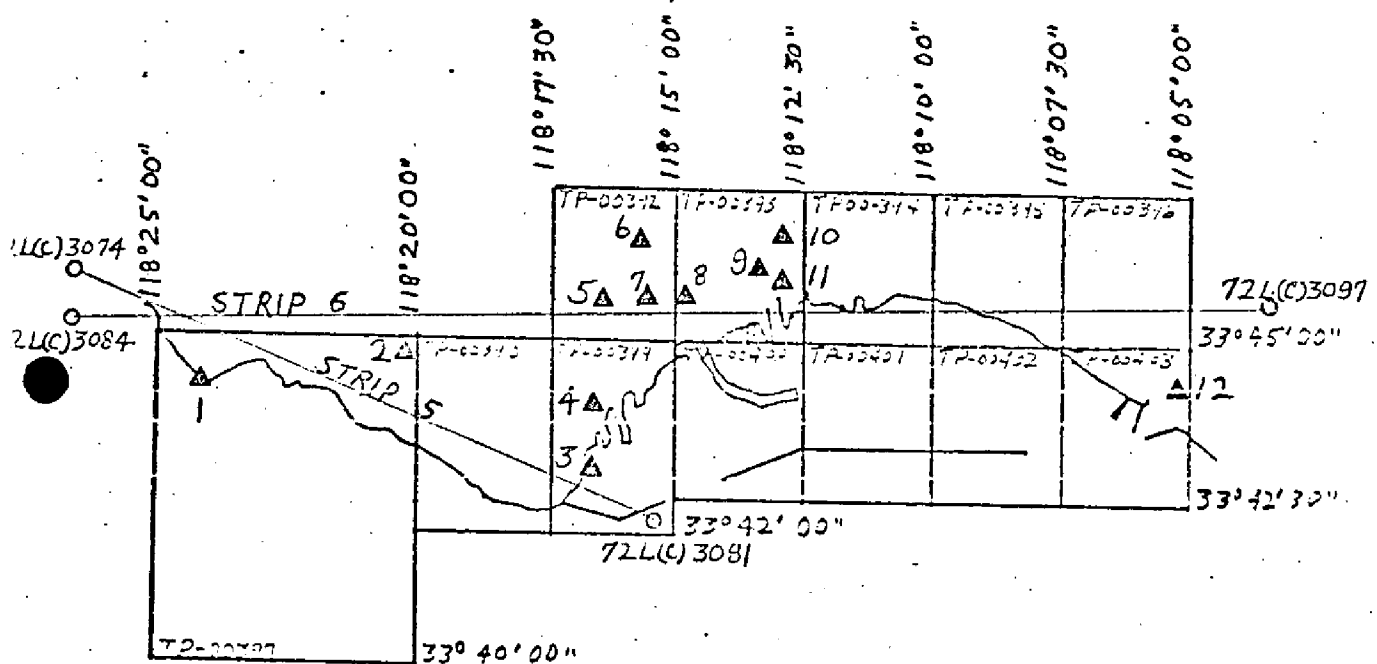
Part 2

Dana Point to Point Vicente

California

Job PH-7107

August 1973



1. Vicente, 1951.
2. Verdes, 1963, Sub pt.
3. Old, 1889, Sub pt.
4. San Pedro Cotton Compress Co. Tank, 1933
5. San Pedro Pacific Coast Borax Co. Stack, 1933
6. Wilmington, Smart & Final Co. Warehouse Tank, 1933
7. Medora 1972
8. Wilmington Berth 176-177 Water Tank, 1933
9. Long Beach Red Band Steel Tank, 1920
10. Long Beach Procter & Gamble Water Tank, 1933
11. Long Beach Red Band Steel Tank, 1920, Sub pt.
12. B.M. N 766, 1956, Sub pt.

Sketch #1

PHOTOGRAMMETRIC PLOT REPORT

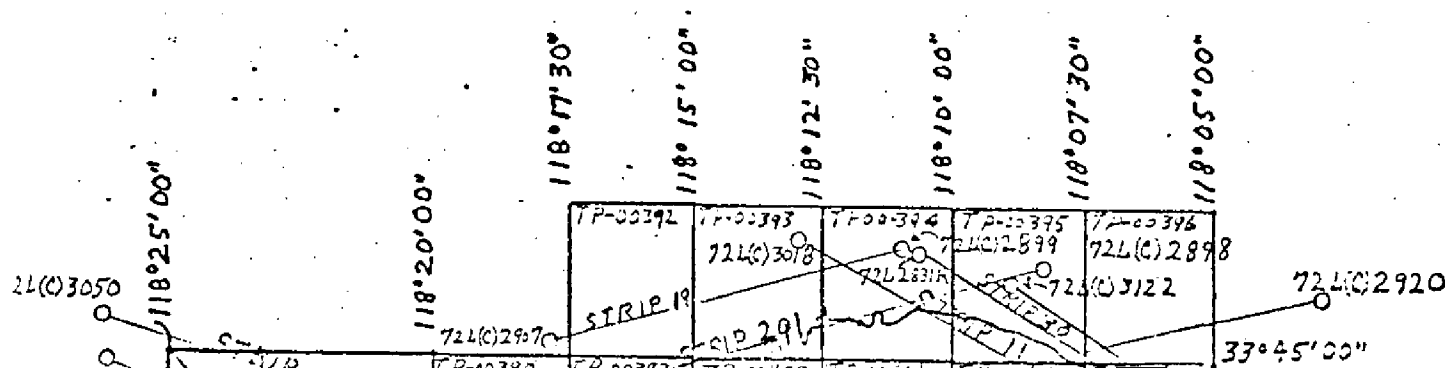
Part 2.

Dana Point to Point Vicente

California

Job PH-7107

August 1973



DESCRIPTIVE REPORT CONTROL RECORD

MAP NO. TP-00402	JOB NO. PH-7107	SOURCE OF INFORMATION (Index)	AEROTRI- ANGULATION POINT NUMBER	GEODETIC DATUM		ORIGINATING ACTIVITY	
				NA 1927	Geographic Position	Coastal Mapping Division	
STATION NAME				COORDINATES IN FEET STATE California ZONE 6	ϕ LATITUDE λ LONGITUDE	REMARKS FORWARD BACK	
LONG BEACH BREAKWATER, EAST END LIGHT, 1953	Quad 331181 STA. 2074			X=	ϕ 33 43 23.40	721.0 (1127.6)	
				Y=	λ 118 08 10.10	260.1 (1284.7)	
				X=	ϕ		
				Y=	λ		
				X=	ϕ		
				Y=	λ		
				X=	ϕ		
				Y=	λ		
				X=	ϕ		
				Y=	λ		
				X=	ϕ		
				Y=	λ		
				X=	ϕ		
				Y=	λ		
				X=	ϕ		
				Y=	λ		
				X=	ϕ		
				Y=	λ		
				X=	ϕ		
				Y=	λ		
				X=	ϕ		
				Y=	λ		
COMPUTED BY	A. C. Rauck, Jr.		DATE	COMPUTATION CHECKED BY F. R. Gustafson		DATE 10/18/73	
LISTED BY			DATE	LISTING CHECKED BY		DATE	
HAND PLOTTING BY			DATE	HAND PLOTTING CHECKED BY		DATE	

COMPILATION REPORT

TP-00402

31. DELINEATION:

The offshore islands and breakwater were compiled by graphic methods. The mean high water line and the mean lower low water line were compiled by B-8 instrument methods.

32. CONTROL:

See the Photogrammetric Plot Report, Part II dated September, 1973.

33. SUPPLEMENTAL DATA:

None.

34. CONTOURS AND DRAINAGE:

Contours are not applicable to the project. There is no drainage.

35. SHORELINE AND ALONGSHORE DETAILS:

The mean high water line and all alongshore details were delineated by office interpretation of the photographs.

36. OFFSHORE DETAILS:

Coverage was sufficient to allow the delineation of Long Beach Breakwater by graphic methods.

37. LANDMARKS AND AIDS:

Copies of Forms 76-40 were forwarded to the field editor for verification, location and/or deletion of charted objects.

38. CONTROL FOR FUTURE SURVEYS:

None.

39. JUNCTIONS:

See the Form 76-36b, item #5 concerning junctions.

40. HORIZONTAL AND VERTICAL ACCURACY:

No statement.

46. COMPARISON WITH EXISTING MAPS:

A comparison has been made with USGS Quadrangle Long Beach, CA, scale 1:24,000, dated 1964.

47. COMPARISON WITH NAUTICAL CHARTS:

A comparison has been made with Chart 5148, scale 1:18,000, 17th edition, dated February 24, 1973.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

None.

ITEMS TO BE CARRIED FORWARD

None.

Submitted by:

Charles Blood

Charles Blood
Cartographic Technician
July 19, 1974

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-00402


Island Chaffee

Island Freeman

Pacific Ocean

San Pedro Bay

Approved by:



Charles E. Harrington, C3x8
Chief Geographer

PHOTOGRAMMETRIC OFFICE REVIEW

TP - 00402

12

1. PROJECTION AND GRIDS FM	2. TITLE FM	3. MANUSCRIPT NUMBERS FM	4. MANUSCRIPT SIZE FM
CONTROL STATIONS			
5. HORIZONTAL CONTROL STATIONS OF THIRD-ORDER OR HIGHER ACCURACY FM	6. RECOVERABLE HORIZONTAL STATIONS OF LESS THAN THIRD-ORDER ACCURACY (Topographic stations) NA	7. PHOTO HYDRO STATIONS NA	
8. BENCH MARKS NA	9. PLOTTING OF SEXTANT FIXES NA	10. PHOTOGRAMMETRIC PLOT REPORT FM	11. DETAIL POINTS FM
ALONGSHORE AREAS (Nautical Chart Data)			
12. SHORELINE FM	13. LOW-WATER LINE FM	14. ROCKS, SHOALS, ETC. FM	15. BRIDGES FM
16. AIDS TO NAVIGATION FM	17. LANDMARKS FM	18. OTHER ALONGSHORE PHYSICAL FEATURES FM	19. OTHER ALONGSHORE CULTURAL FEATURES FM
PHYSICAL FEATURES			
20. WATER FEATURES FM	21. NATURAL GROUND COVER NA	22. PLANETABLE CONTOURS NA	
23. STEREOSCOPIC INSTRUMENT CONTOURS NA	24. CONTOURS IN GENERAL NA	25. SPOT ELEVATIONS NA	26. OTHER PHYSICAL FEATURES FM
CULTURAL FEATURES			
27. ROADS FM	28. BUILDINGS FM	29. RAILROADS FM	30. OTHER CULTURAL FEATURES FM
BOUNDARIES			
31. BOUNDARY LINES NA	32. PUBLIC LAND LINES NA		
MISCELLANEOUS			
33. GEOGRAPHIC NAMES FM	34. JUNCTIONS FM	35. LEGIBILITY OF THE MANUSCRIPT FM	
36. DISCREPANCY OVERLAY FM	37. DESCRIPTIVE REPORT FM	38. FIELD INSPECTION PHOTOGRAPHS NA	39. FORMS FM
40. REVIEWER <i>Frank Margiotta</i> Frank Margiotta 7/74		SUPERVISOR, REVIEW SECTION OR UNIT <i>Albert C. Rauck, Jr.</i> Albert C. Rauck, Jr.	
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 <i>David Butler</i> David Butler 7/24/75		SUPERVISOR <i>Albert C. Rauck, Jr.</i> Albert C. Rauck, Jr.	
Reviewer: <i>A.L. Shands</i> A.L. Shands 10/75			
43. REMARKS See form 76-36C, item 8 of Field Edit Operations.			

FIELD EDIT REPORT

Long Beach and Los Angeles Harbor

Field edit was completed by DAVIDSON during the month of April 1975 on the following seven manuscripts:

TP 00392	TP 00399
TP 00393	TP 00400
TP 00394	TP 00401
	TP 00402

Field edit should be considered complete on these sheets with the exception of a small area on TP 00399 outside the Los Angeles Breakwater near Point Fermin. Heavy weather precluded proper verification of the ledge shown on the manuscript. The FAIRWEATHER is scheduled to conduct hydrography in that area in the fall of 1975 and plans to delineate this ledge using hydrographic methods. The office compilation of these manuscripts is very good. All questions have been answered and changes are shown in purple ink on the discrepancy ozalids and photographs.

Prior to conducting the field edit, DAVIDSON located many of the important landmarks and navigation aids within the harbor to 3rd order geodetic standards. The harbor area has experienced some horizontal shifting in recent years caused by the depletion of the underlying oil fields. Movements of as much as 3 meters were found. A copy of this report along with completed forms 76-40 giving new positions is included in the appendix. Many of the landmarks located by geodetic means were also listed on the forms 76-40 originated by AMC. References are noted on AMC's forms. In general, the photogrammetrically derived positions agreed quite well with DAVIDSON's horizontal control work.

Field Inspection

The photographs and discrepancy ozalids were taken into the field for verification. Our success at photo identification was poor, partly because of the inexperience of the officer conducting the field inspection and partly because pass points on the photographs obliterated many of the objects to be identified. Most positions were located by three point sextant fix with check angle. G.P.'s of both the fix and check fix were computed on the PDP 8e computer using the geodetic resection program RK-410. A listing of these verified G.P.s by fix number is included in the appendix. Each G.P. listed has been double checked and should be considered accurate. An abstract, by fix number, of the raw field data is also included for reference. It should be noted that not all the fixes listed apply to the field edit of these seven manuscripts. This list is a compilation of field edit fixes and other fixes relating to OPR-511 Chart Adequacy Survey field work - much of which overlap.

Many of the question asked of the field editor involved locating the shore ends of cable and pipe line crossings. In many cases, these shore ends were not visible because piers or other structures hid them. Those that could be located were. A manuscript was obtained from the Los Angeles Harbor Commission showing all utility and pipeline crossings in the Los Angeles half of the harbor. It is included with the data. It is recommended that the Long Beach Port authorities be contacted for a similar manuscript of the Long Beach half of the harbor.

Submitted

R. D. Hopkins
R. D. HOPKINS
LCDR, NOAA

Approved

R. D. Hopkins
For M. H. FLEMING
CDR, NOAA

FIELD EDIT REPORT

MAP TP-00402

LONG BEACH BREAKWATER

MARCH 1976

Field work on map TP-00402 was completed by LTJG Gregory P. Kosinski, ENS J.D. Conrad, and ENS G.E. Leigh during March, 1976. The six range markers on the Long Beach Breakwater and four lighted markers on each of Islands Chaffee and Freeman were located. A turning point, RANGE T.P., was established by open traverse on the breakwater, from which open traverses were observed to each measured mile marker. To determine the position of each island light, either a short traverse was observed from a resected turning point set up near the marker, or a theodolite resection was performed. The field position of each aid to navigation is listed on form 76-40, attached. The fix data and form 76-40 as submitted by the NOAA Ship DAVIDSON in 1975 regarding the location of these aids to navigation is also attached.

It is recommended that the map be revised in accordance with the notes on the ozalids and the positions submitted. Refer to Horizontal Control Report, OPR-411-FA-76, for details of the field work.

Respectfully submitted:

Gregory P. Kosinski

Gregory P. Kosinski, LTJG, NOAA

NOAA FORM 76-40
(8-74)

Replaces C&GS Form 567.

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

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

<input checked="" type="checkbox"/> TO BE CHARTED <input type="checkbox"/> TO BE REVISED <input type="checkbox"/> TO BE DELETED		REPORTING UNIT IF field party, Ship or Office Coastal Mapping Div. A.M.C. Norfolk, Va.	STATE California	LOCALITY Dana Point to Point Vicente	DATE May, 1976
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The following objects HAVE ☒ BEEN INSPECTED FROM SEAWARD TO DETERMINE THEIR VALUE AS LANDMARKS.

CHARTING NAME	DESCRIPTION (Record reason for deletion of landmark or aid to navigation. Show triangulation station names, where applicable, in parentheses)	DATUM			POSITION			METHOD AND DATE OF LOCATION (See instructions on reverse side)		CHARTS AFFECTED	
		JOB NUMBER	SURVEY NUMBER	N.A. 1927	LATITUDE		LONGITUDE		OFFICE		FIELD
					° /	D.M. Meters	° /	D.P. Meters			
411	Ph-7107	TP-00402									
MARKER	Measured Mile Range Front Marker	33 43	23.541 725.3	118 08	41.310 1063.6			F-2-6-L March, 1976	18749 18751		
MARKER	" " " Rear "	33 43	23.303 718.0	118 08	41.310 1063.6			" "	" "		
MARKER	Half Mile Range Front Marker	33 43	23.482 723.5	118 09	17.147 441.5			" "	" "		
MARKER	" " " Rear - "	33 43	23.335 719.0	118 09	17.142 441.3			" "	" "		
MARKER	Measured Mile Range Front Marker	33 43	23.614 727.5	118 09	53.277 1371.7			" "	" "		
MARKER	" " " Rear "	33 43	23.256 725.5	118 09	53.275 1371.6			" "	" "		
LIGHT	(Long Beach Breakwater, East End Light, 1953)	33 43	23.40 721.0	118 08	10.10 260.1			F-3-6-L April, 1975	" "		
									14a		

(See reverse for responsible personnel)

Replaces C&GS Form 567.

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NONFLOATING AIDS OR LANDMARKS FOR CHARTS

REPORTING UNIT (If field party, ship or office)		STATE	LOCALITY	DATE	ORIGINATING ACTIVITY			
<input checked="" type="checkbox"/> TO BE CHARTED	<input type="checkbox"/> TO BE REVISED	<input type="checkbox"/> TO BE DELETED	California	Dana Point to Point Vicente	May, 1976	<input type="checkbox"/> HYDROGRAPHIC PARTY <input type="checkbox"/> GEODETIC PARTY <input type="checkbox"/> PHOTO FIELD PARTY <input checked="" type="checkbox"/> COMPILATION ACTIVITY <input type="checkbox"/> FINAL REVIEWER <input type="checkbox"/> QUALITY CONTROL & REVIEW GRP. <input type="checkbox"/> COAST PILOT BRANCH (See reverse for responsible personnel)		
The following objects HAVE <input checked="" type="checkbox"/> BEEN INSPECTED FROM SEAWARD TO DETERMINE THEIR VALUE AS LANDMARKS.		SURVEY NUMBER		DATUM		METHOD AND DATE OF LOCATION (See instructions on reverse side)		CHARTS AFFECTED
OPR PROJECT NO.	JOB NUMBER	TP-00402		N.A. 1927		OFFICE	FIELD	
CHARTING NAME	DESCRIPTION (Record reason for deletion of landmark or aid to navigation. Show triangulation station names, where applicable, in parentheses)	POSITION		LONGITUDE				
		LATITUDE	LONGITUDE	D.P. Meters	D.P. Meters			
	ISLAND FREEMAN MARKERS							
MARKER	Lighted	33 44	32.990 1016.4	118 09	36.747 945.9	F-4-6-L March, 1976		18749 18751
MARKER	Lighted, with Horn Fog Signal	33 44	23.916 736.9	118 09	39.472 1016.0	F-2-6-L March, 1976		" "
MARKER	Lighted	33 44	25.718 792.4	118 09	46.267 1191.0	"		" "
MARKER	Lighted	33 44	32.490 1001.0	118 09	44.097 1135.1	"		" "
	ISLAND CHAFFER MARKERS							
MARKER	Lighted	33 44	26.689 822.3	118 08	14.707 378.6	F-2-6-L March, 1976		"
MARKER	Lighted	33 44	21.776 670.9	118 08	13.938 358.8	"		" "
MARKER	Lighted, with Horn Fog Signal	33 44	19.991 615.9	118 08	19.708 507.3	"		" "
MARKER	Lighted	33 44	24.732 762.7	118 08	23.022 592.6	F-4-6-L March, 1976		" "

REVIEW REPORT
TP-00402

SHORELINE

September 5, 1978

61. GENERAL STATEMENT:

See Summary, page 6 of this Descriptive Report.

This map was edited in April, 1975 and March, 1976. The location of markers by sextant during the 1975 edit was inadequate. All markers shown on the map were relocated in 1976 by traverse.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS:

Not applicable.

63. COMPARISON WITH MAPS OF OTHER AGENCIES:

Not applicable.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:

Comparison was made with a copy of Final Verified Smooth Sheets H-9673 (FA-5-4-77) and H-9674 (FA-5-5-77). There are no differences among common details.

65. COMPARISON WITH NAUTICAL CHARTS:

Comparison was made with Charts 18749, 1:18,000 scale, 21st edition, dated March 26, 1977 and 18751, 1:12,000 scale, 24th edition, dated March 18, 1978.

The position of Islands Freeman and Chaffee as shown on the charts is slightly different from that shown on the map. Piles and ramps mapped on the north side of each of the islands and the mean lower low water line shown at the northeast corner of the map are not shown on the chart.

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS:

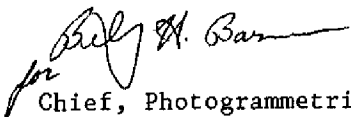
This map complies with the Project Instructions and meets the requirements for Bureau Standards and the National Standards of Map Accuracy.

Submitted by:

A. L. Shands

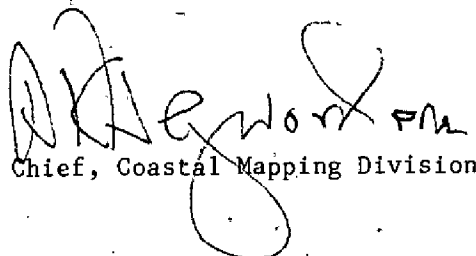
A. L. Shands
Final Reviewer

Approved for forwarding:

for 
Chief, Photogrammetric Branch, AMC

Approved:


Chief, Photogrammetric Branch


Chief, Coastal Mapping Division

RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO.

ТРОУГОЛ

INSTRUCTIONS

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart.

1. Letter all information.
2. In "Remarks" column cross out words that do not apply.
3. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.

[illegible]