

11870 (2)

11870(2)

NOAA FORM 76-35

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

DESCRIPTIVE REPORT

Type of Survey ... Shoreline (REVISION).....

Job No. ..PH-6702..... Map No. T-11870(2).

Classification No. Edition No. ...2.....

FIELD EDITED MAP * See below

LOCALITY

State California

General Locality .. Pacific Ocean Coastline

Locality ... Oceanside

~~1968 TO 1970~~

1966 to 1972

REGISTRY IN ARCHIVES

DATE

★ U.S. GOVERNMENT PRINTING OFFICE: 1973-761-775

* Mean high water and mean lower low water lines delineated from office interpretation of the photographs. Scope of map revision outlined in SUMMARY.

TYPE OF SURVEY

SURVEY T-11870(2)

DESCRIPTIVE REPORT - DATA RECORD

☐ ORIGINAL

MAP EDITION NO. (2)

☐ RESURVEY

MAP CLASS

☒ REVISED

JOB PH- 6702

PHOTOGRAMMETRIC OFFICE

Atlantic Marine Center

OFFICER-IN-CHARGE

Alfred C. Holmes, Director

LAST PRECEDING MAP EDITION

TYPE OF SURVEY

JOB PH- 6011

☐ ORIGINALMAP CLASS Field Edited☐ RESURVEY

SURVEY DATES:

☐ REVISED19 60 TO 19 62

I. INSTRUCTIONS DATED

1. OFFICE

Revision Compilation 8/23/66
Revision Compilation Amend #1 12/8/66
Revision Compilation Amend #2 2/17/67
Revision Compilation Amend #3 12/7/67
Revision Compilation Amend #4 8/10/72
" " " #5 9/23/74

2. FIELD

Field Edit, dated Sept. 2, 1969
Field-Supp. 1, dated Feb. 25, 1972
Field Edit instructions listed
in OPR (hydro) instructions

II. DATUMS

1. HORIZONTAL:

☒ 1927 NORTH AMERICAN

OTHER (Specify)

2. VERTICAL:

☒ MEAN HIGH-WATER☐ MEAN LOW-WATER☒ MEAN LOWER LOW-WATER☐ MEAN SEA LEVEL

OTHER (Specify)

3. MAP PROJECTION

Polyconic

4. GRID(S)

STATE
CaliforniaZONE
6

5. SCALE

1:10,000

STATE

ZONE

III. HISTORY OF OFFICE OPERATIONS

OPERATIONS		NAME	DATE
1. AEROTRIANGULATION METHOD: None	BY	See Project Completion	
LANDMARKS AND AIDS BY		Report	Mar, 1968
2. CONTROL AND BRIDGE POINTS METHOD: None	PLOTTED BY	See Project Completion	
CHECKED BY		Report	Mar, 1968
3. STEREOSCOPIC INSTRUMENT COMPILATION	PLANIMETRY BY	NA	
INSTRUMENT: None		CHECKED BY	NA
SCALE:		CONTOURS BY	NA
		CHECKED BY	NA
4. MANUSCRIPT DELINEATION	PLANIMETRY BY	B. Wilson	Feb, 1968
		CHECKED BY	R. Pate
		CONTOURS BY	NA
		CHECKED BY	NA
METHOD: Graphic			
SCALE: 1:10,000			
HYDRO SUPPORT DATA BY		B. Wilson	Feb, 1968
		CHECKED BY	R. Pate
5. OFFICE INSPECTION PRIOR TO FIELD EDIT	BY	R. Pate	Mar, 1968
6. APPLICATION OF FIELD EDIT DATA	BY	C. Blood	Jul, 1972
		CHECKED BY	R. White
7. COMPILATION SECTION REVIEW	BY	R. White	Jul, 1972
8. FINAL REVIEW	BY	Bernard Kurs, AMC *	Feb, 1975
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH	BY		
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH	BY	J. Blonkenbaker	Apr. 1975
11. MAP REGISTERED - COASTAL SURVEY SECTION	BY	R. Cator	Jun. 1975

* refer to SUMMARY, page 6, concerning revision work by B. Kurs, in 1974 & 1975.

COMPILATION SOURCES

1. COMPILATION PHOTOGRAPHY

CAMERA(S) Wild RC-8 "S"		TYPES OF PHOTOGRAPHY LEGEND (C) COLOR X (P) PANCHROMATIC (I) INFRARED X		TIME REFERENCE	
TIDE STAGE REFERENCE <input checked="" type="checkbox"/> PREDICTED TIDES (1966 PHOTOGRAPHY) * <input type="checkbox"/> REFERENCE STATION RECORDS <input checked="" type="checkbox"/> TIDE CONTROLLED PHOTOGRAPHY (See Remarks) 1972 PHOTOGRAPHY				ZONE 8th	<input checked="" type="checkbox"/> STANDARD
				MERIDIAN 120th	<input type="checkbox"/> DAYLIGHT
NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE	
66S-4696I - 4699I	8/7/66	13:11 PST	1:30,000	0.3 ft. below MHW	
66S(C) 4532A - 4536A	8/7/66		1:20,000		
72-L-2432R - 2436R	3/23/72	13:00 PST	1:20,000	MLLW (0.0 ft.)	

REMARKS TIDE STATION FOR 1972 PHOTOGRAPHY - Oceanside, Calif.

* The 1966 photography used in first revision activity (Class III Manuscript stage)

2. SOURCE OF MEAN HIGH-WATER LINE:

1:20,000 scale infrared photography, dated March 23, 1972 (listed above)
Note: Line office interpreted subsequent to field edit.

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

1:20,000 infrared photography, dated March 23, 1972 (listed above)
Note: Line office interpreted subsequent to field edit.

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
T-11869	No survey	T-11871	No survey

REMARKS

HISTORY OF FIELD OPERATIONS

I. ☐ FIELD INSPECTION OPERATION☒ FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	R.E. Moses, CDR	Mar, Apr., 1970
2. HORIZONTAL CONTROL	RECOVERED BY R.E. Moses, CDR	" " "
	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 J.R. Faris	Dec, 1971
	LOCATED (Field Methods) BY G.H. Endrud and H.W.H	May, 1970
	IDENTIFIED BY	
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION <input type="checkbox"/> COMPLETE <input type="checkbox"/> SPECIFIC NAMES ONLY <input checked="" type="checkbox"/> NO INVESTIGATION	
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY W.K. Taguchi	Apr, 1970
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY	

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED

None

2. VERTICAL CONTROL IDENTIFIED

NA

PHOTO NUMBER

STATION NAME

PHOTO NUMBER

STATION DESIGNATION

3. PHOTO NUMBERS (Clarification of details)

66S(C)-4532

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED

PHOTO NUMBER

OBJECT NAME

PHOTO NUMBER

OBJECT NAME

Not Ident. LIGHT 4 Oceanside Harbor
Not Ident. LORAC STATION
Not Ident. LIGHT 3 Oceanside Breakwater
Not Ident. LIGHT 4
Not Ident. DAYBEACON 8
Not Ident. LIGHT 9

Not Ident. LIGHT 6
Not Ident. DAYBEACON 7
Not Ident. LIGHTED TOWER
Not Ident. VORTAC

Refer to copies of Forms 507 & 76-40 included in this report

5. GEOGRAPHIC NAMES:

☐ REPORT☒ 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 Edit Ozalid

RECORD OF SURVEY USE

I. MANUSCRIPT COPIES

COMPILATION STAGES			DATE MANUSCRIPT FORWARDED	
DATA COMPILED	DATE	REMARKS	MARINE CHARTS	HYDRO SUPPORT
Compilation Complete	Dec, 1963	Superseded		
Shoreline Revised for Hydro	Feb, 1968	Class III Manuscript Designated "RS-Survey" Superseded	March 1968	Date 1970 Unknown
Apr., 1970 Field Edit Applied	Jul, 1972	Redesignated "2nd Map Edition" Sept. 1969 Superseded Class I Manuscript	NONE	NONE
REVISED FROM 1972 PHOTOS	1974-1975	Superseded	None	none
Final Review	Feb., 1975			

II. LANDMARKS AND AIDS TO NAVIGATION

1. REPORTS TO MARINE CHART DIVISION, NAUTICAL DATA BRANCH

NUMBER	CHART LETTER NUMBER ASSIGNED	DATE FORWARDED	REMARKS
			Refer to Forms 567 & 76-40 included in this report

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:

Photograph & Field edit Sheet

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	

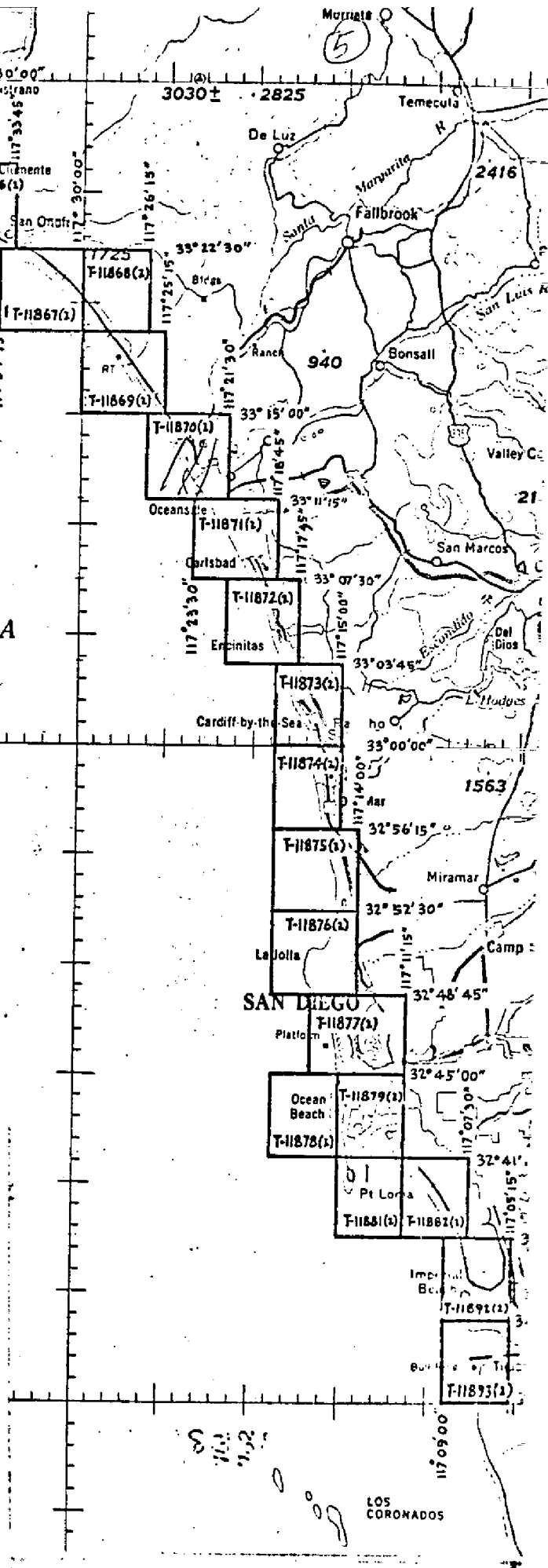
OFFICIAL MILEAGE
For Cost Accounts---

Sheet Nos.	Area Sq. Mi.
T-11864 (2)	2
T-11865 (2)	1
T-11866 (2)	3
T-11867 (2)	3
T-11868 (2)	1
T-11869 (2)	3
T-11870 (2)	3
T-11871 (2)	3
T-11872 (2)	2
T-11873 (2)	2
T-11874 (2)	2
T-11875 (2)	2
T-11876 (2)	3
T-11877 (2)	6
T-11878 (2)	2
T-11879 (2)	5
T-11881 (2)	2
T-11882 (2)	4
T-11892 (2)	5
T-11893 (2)	2
Total	56

JOB PH-6702

CALIFORNIA COAST
MEXICO TO
DANA POINT

REVISION OF
SHORELINE MAPPING
SCALE, 1:10,000



6

Summary (Revised) to Accompany Descriptive Reports
Job PH-6702

This job consists of twenty 1:10,000-scale revised shoreline maps covering the area from Dana Point, California, to the Mexican border. The original (registered) maps were produced as a part of PH-6011.

Revision, using 1966 photography, by graphic method, was accomplished by the Coastal Mapping Section, AMC, during 1967 and 1968.

As indicated in Descriptive Report records, copies of the twenty (20) Class III map manuscripts were furnished to the Marine Chart Division in 1968. At that time the map manuscripts were designated as "RS" manuscripts (Nos. 842 through 861).

Field edit was accomplished from 1968 to 1972. In September 1969 the 20 map manuscripts were redesignated as second editions of the original registered maps (produced as a part of PH-6011).

All field edit data was applied by the Coastal Mapping Section, AMC.

Revision of the Class I (field edited) manuscripts with tide-coordinated infrared photographs taken in 1972 was originally assigned to the Revision Survey Section, Rockville. This work was completed by the final review activity, AMC, in 1974 and 1975.

Interior details were revised in Rockville; the MHW line and features seaward from the line (including the MLLW line) were revised at the AMC. Interior features were not examined by the final review activity (AMC).

Comments concerning application of the 1972 tide-coordinated photographs to the map manuscripts, which were included in the "Summary" prepared by the final reviewer follow: "Revision was by graphic methods. In places where 1972 photography could not be held to previous control or planimetry, additional control, using common points with 1966 photography, were cut in to control the infrared photographs".

"In comparison with (those) contemporary hydrographic survey sheets (available the time of final review) it was found that the soundings stopped at the breaker line, leaving no conflicts with the photogrammetric surveys. Most of the foreshore area consisted of sand, pebbles, and boulders with the exception of the Point Loma area. This is an inherent stable shoreline extensively made up of ledge on the seaward site. Since

breakers are almost continuous throughout the project, the seaward limits of the ledges, (the MLLW line) were difficult to determine. However, it is felt by the reviewer that they are adequate (as shown). These limits were not determined by the field editor."

There was considerable surf action at the time of photography. The interpretation and delineation of the MHW and MLLW lines were not verified during the examination of job data by the quality control activity, Rockville. Based on an earlier examination of the photography in Rockville and the final reviewer's evaluation, above, these lines are considered adequate for nautical navigational purposes. Photographs taken when there is less surf action or photographs supplemented by foreshore profiles are required for a more accurate determination of these lines.

Conflicts in recorded information as well as omissions of information were found to exist in records upon examination of the Descriptive Reports and the Job Completion Report in the Rockville Office. It is believed that this resulted from (1) the long operational period for the job, (2) the division of responsibilities between several activities and the several field edit operations for some maps in the job. Some records were lost. The Descriptive Reports and Job Completion Report Records were corrected insofar as practicable during this examination.

No record for the submission of Form 76-40 (Landmarks and Aids to Navigation) to the Marine Chart Division was found. Available forms were submitted to the Marine Chart Division in April 1975.

Auth. Blankinship

9

FIELD INSPECTION REPORT

There was no field inspection prior to compilation.

REVISION REPORT
PH-6702
DANA POINT, CALIF. TO MEXICO

10

Twenty manuscripts were revised and photo hydrographic support data were prepared. Work was started at the south end of the project and progressed to the north.

PHOTOGRAPHY

All revision was by graphic methods using photography taken in 1966 with the "S" type camera. These were 1:30,000 scale with infrared at mean high water and 1:20,000 scale color at mean lower low water. Some difficulty was noted in defining the exact centers of the ratio prints from the M.L.L.W. color photography. (See attached "Notes for the Hydrographer" explaining this deficiency and Resolution.)

CONTROL

Direct or stereo transfer of identifiable horizontal control (triangulation, original bridge pass points, landmarks and/or aids) was made from any remaining original photography (office of field prints) to the 1966 color ratios and infrared ratios. The infrared ratios were first determined from points common to the manuscripts and the infrared contact prints. These ratios (in cronapaque only) were then processed and new points intersected common to the color contact prints. These distances then determined the ratio factor for the color ratios (in black and white).

In areas of the project where control such as identifiable triangulation stations, original bridge pass points, or landmarks and/or aids, were scarce or no longer in existence for transfer to the new photography; an alternative method of identifying common points of details was used. i.e.: Street intersections, R.R. and street crossings, or any other well defined point of detail.

SHORELINE AND ALONGSHORE DETAILS:

In as much as project instructions called for shoreline revision only, with a few exceptions, such as new landmarks, and new highways within the compilation limits; the M.L.L.W.L., foreshore area, and alongshore area was revised from the M.L.L.W. photos. The M.H.W.L. was revised from the infrared photos. All revisions were made in red plastic ink, office reviewed and appropriate data prepared for hydro support and further field edit. Nine survey sheets, with hydro support data and edit ozalids have been forwarded to the Pacific Marine Center. Of these, only two have been returned with pertinent field edit data. They are T-11892 and T-11893. (See attached copies of transmittals.) One cronaflex copy and one ozalid copy of each of the twenty revised sheets have also been forwarded to Mr. Lewis Evans, III for his files. *

* classified as RS sheets at that time

(11)

The remaining eleven revised surveys, with all hydro support data were forwarded to Mr. Fitzgerald's office for storage until future ship assignment. All remaining data is forwarded to Mr. Wolfe for adequate and safe storage.

LANDMARKS AND AIDS

Two new landmarks were photogrammetrically established. They are: Standpipe, 1966 on T-11873, and Tank, 1966 on T-11872. These were identified on original field inspection photos 60-S-456A and 60-S-516A, dated 12/8/61 and 12/1/61. Neither were delineated on the original compilations, nor were they previously charted. Forms 567 were requested of any future field edit party.

FINAL REVIEW

All twenty surveys or manuscripts are subject to a final review and completion of reports, after application of any future field edit. Further scribing or smooth draft for final registration in Bureau Archives is a subject for future discussion and decision.

Submitted by

Albert C. Rauck, Jr.

Albert C. Rauck, Jr.
Supervisory Cartographer
Coastal Mapping
Atlantic Marine Center,
Norfolk, Virginia

March 29, 1968

PROJECT SUMMARY

This revision of PH-6011, under revision instructions for PH-6702, consisted of 20 shoreline manuscripts. These "Manuscripts" were black-line impressions on vinylite of the original PH-6011 smooth drafted surveys.

The purpose of this project was to revise the "New Base" manuscripts graphically with new 1966 photography and to provide new hydrographic support data.

Albert C. Rauck, Jr.

Albert C. Rauck, Jr.
Supervisory Cartographer

DANA POINT, CALIFORNIA TO MEXICO

ADDENDUM TO COMPLETION REPORT - FIELD EDIT

The field edit of these 20 revised map manuscripts was accomplished during the field seasons from February 1970 through March 1972.

The following tabulated list of manuscripts indicate dates of edit and application.

<u>Map No.</u>	<u>Date of Field Edit</u>	<u>Date of Application</u>
T-11864 (2)	March, 1972	July, 1972
T-11865 (2)	March, 1972	July, 1972
T-11866 (2)	March, 1972	July, 1972
T-11867 (2)	March, 1972	July, 1972
T-11868 (2)	March, 1972	July, 1972
T-11869 (2)	March-April 1970, March 1972	July, 1972
T-11870 (2)	Mar.-Apr. May, 1970, Dec. 1971*	July, 1972 * see below
T-11871 (2)	Mar.-Apr. May, 1970, Dec. 1971	July, 1972
T-11872 (2)	March-April, 1970	July, 1972
T-11873 (2)	March-April, 1970, Dec. 1971	July, 1972
T-11874 (2)	March-April, 1970,	July, 1972
T-11875 (2)	Feb. 1970	July, 1972
T-11876 (2)	Feb. Mar. Apr. 1970, Feb. 1968	Dec. 1968 and Aug. 1972
T-11877 (2)	Feb. Mar. Apr. 1970	April 1968 and July 1972
T-11878 (2)	Feb. Mar. Apr. 1970, Feb. 1968	April 1968 and July 1972
T-11879 (2)	Feb. 1970, Feb. 1968	Dec. 1968 and July 1972
T-11881 (2)	Feb. 1970, Feb. 1968	Dec. 1968 and July 1972
T-11892 (2)	Feb. 1970, Feb. 1968	May 1967, Dec. 1968 Aug. 1972
T-11893 (2)	Feb. 1970, Feb. 1968	May 1967, Dec. 1968 Aug. 1972

Field edit was applied from data furnished on the field edit ozalids and the field ratio photographs. Landmarks and non-floating aids to navigation, when photo identified or when positions were determined by field methods, were plotted or verified on each map.

There are 12 form 76-40 and 5 form 567 submitted by the various field edit parties throughout the several field seasons. Those which were out of the project limits, were not plotted and the forms were so indicated.

* Field Edit Report dated April 1970.

1971 date applies to horizontal control recovery (See Data Record) - landmarks

Refer to copies of Landmark forms included in this Descriptive Report

During the intervening years of the span of field seasons, there were duplications of forms for landmarks and/or aids, and many aids were moved or renamed. An attempt to clarify these items, necessitated pencil notations on the forms as an assist to the Chart Revision Section if future revision is to be necessary. The field editor of March, 1972, made reference to 1972 photography, which was not made available to the Atlantic Marine Center. It is believed that these photos will be utilized to further revise the M.H.W.L.

There were many Triangulation Stations recovered during the field seasons. Forms 526 were submitted by the field editors and these were checked against those control stations previously plotted on the maps. Those for which no positions were available were not plotted, as no geodetic control was furnished the AMC compilation office during the revision of this project.

Several measured distances to the MHWL were given by the field editor. These could not be used, when drastic changes were indicated and it was deemed advisable to have these incorporated with future revision from the 1972 photographs. A few of the measurements were in agreement with the 1966 revised MHWL.

The most noted difficulty encountered in applying the field edit, concerned the location of lights and beacons on Map T-11882. The field editor submitted form 567 for a group of non-floating aids in Glorietta Bay and Coronado Cay Channel for which he gave no positions.

The lights in these areas are triangulated and the beacons were located by sextant fixes from the lights, but without the geodetic positions of the lights, the beacons could not be plotted.

There is an overlap of 1'15" in longitude between Map T-11864 of Project PH-6702 and Map TP-00415 of Project PH-7107. This was necessary due to the change of format size between the projects.

Shoreline and other details were made to agree in the overlap junction by delineating T-11864 to conform with TP-00415 which was compiled with later photography.

Submitted by:

Albert C. Rauck, Jr.

Albert C. Rauck, Jr.
Supervisory Cartographer
Coastal Mapping Division
Atlantic Marine Center
Norfolk, VA 23510
August 9, 1972

26 August 1974

GEOGRAPHIC NAMES

FINAL NAME SHEET

Ph-6702 (Southern California Coastline)

T-11870 (2)

Atchison Topeka and Santa Fe (RR)

Camp Del Mar

Camp Joseph H. Pendleton Naval Reservation

Del Mar Boat Basin (Camp Pendleton)

Fallbrook Junction

Gulf of Santa Catalina

Oceanside

Oceanside Harbor

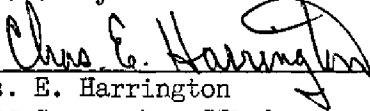
Pacific Ocean

San Luis Rey River

Santa Margarita Lagoon

Santa Margarita River

Approved by:


Chas. E. Harrington
Staff Geographer-C51x2

19. NOTES FOR THE HYDROGRAPH

Two sets of photographs were used in the compilation of the revised shoreline on these surveys.

One set of infrared photographs at MLW were used in the delineation of the MLW line. The second set, in color, were taken at MLW and were used only for the delineation of the MLW line and other low water features. Both sets of photos were related to the scale of the maps.

Some difficulty was encountered in defining the exact centers of the ratio photos made from the MLW color photos which are furnished to you. The original photos were of such quality that the fiducial marks did not produce well and did not appear on the contact prints nor the related prints. Several attempts or methods were made to define these fiducial marks, but without success. It was, therefore, necessary to locate these photo centers by a method that at best is only approximate. This information is made available to you, should you encounter any difficulty in laying these photos to their respective centers on the map sheets while "cutting in" your photo hydro stations.

Appropriate notes will be found on the "FIELD EDIT ORALID" calling your attention to items in need of further clarification and/or edit.

FIELD EDIT REPORT
MAP T-11870
Southern California
OPR-411
April 1970

The investigation was done by Lt(jg.) Taguchi. Field work was done on foot from a car.

METHOD

Field photographs and a copy of the field edit ozalid were taken into the field. All verification was done by visual observation. The specific items of question, as listed on the ozalid were visited for verification. The MHWL was determined by pacing from a photo-identifiable object or by sextant fixes. Landmarks were identified and listed on accompanying Form 567.

Notes have been made in violet on the field photographs and cross-referenced in the field edit ozalid by circling the photograph number. Notes on the ozalid have been made in blue. All sextant cuts and control have been placed on the ozalid. Notes are on the following photographs:

66 S 4532
66 S 4533

ADEQUACY OF COMPILATION

The compilation of the map appears to be adequate.

RECOMMENDATIONS

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

Field Edit Report: Map T-11870
Page two

18

The two new navigational aids (lights) in the Oceanside Harbor are charted on C&GS Chart #5101. The South Jetty Light 2 is found on the end of a new jetty arm, an extension of the previous South Jetty. The lights were located by sextant fixes. The position of the LORAC station was determined by sextant fixes.

Respectfully submitted,

Warren K. Taguchi

Warren Taguchi
Lt(jg.), USESSA

REVIEW REPORT

T-11870(2)

Feb., 1975

61. GENERAL STATEMENT:

See Summary which is included in the Descriptive Report.

62. COMPARISON WITH REGISTERED SURVEYS:

Comparison was made with two prior surveys. T-5413 compiled at 1:10,000 scale with 1934 photography bears little resemblance to the current chart. Extensive breakwaters constructed at the entrance to Oceanside Harbor have altered current flow patterns and caused significant shoreline changes.

T-11870 compiled with 1960 photography at 1:10,000 scale reveals further accumulation of sand south of the south jetty at the entrance to Oceanside Harbor. There has been considerable cultural development in the form of piers and slips in the Harbor. Shoreline changes in the southwestern portion of Santa Margarita Lagoon are extensive.

T-11870(2) should be used for nautical chart construction.

63. COMPARISON WITH MAPS OF OTHER AGENCIES:

Comparison was made with U.S.G.S. 1:24,000 scale Quadrangle, Oceanside, California dated 1968. Except for the new groin located between the south jetty and the municipal fishing pier no significant differences were noted.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:

Comparison was made with a copy of boat sheet H-9251. There are no significant differences.

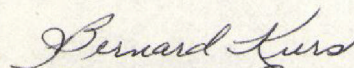
65. COMPARISON WITH NAUTICAL CHARTS:

A visual comparison was made with chart 5101 at 1:234,270 scale and dated Oct. 6, 1973. There is a 1:20,000 insert of Oceanside Harbor on this chart. There are no significant differences.

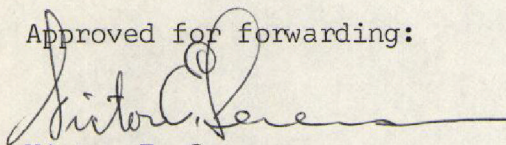
66. ADEQUACY OF RESULTS AND FUTURE SURVEYS:

This survey conforms with Project Instructions and meets the National Standards of Map Accuracy. *Refer to SUMMARY, Page 6*

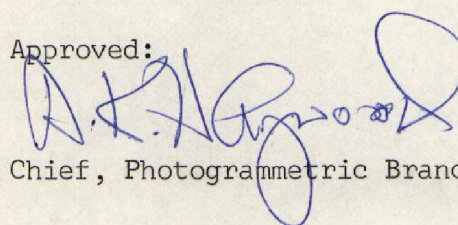
Reviewed by:

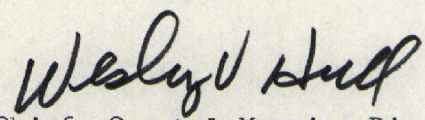

Bernard Kurs
Cartographer

Approved for forwarding:


Victor E. Serena
Chief, Photogrammetric Branch, AMC

Approved:


Chief, Photogrammetric Branch *JB*


Chief, Coastal Mapping Div.

[illegible]

RESPONSIBLE PERSONNEL	
TYPE OF ACTION	NAME
1. Objects inspected from seaward	J. Richard Faris, ENS. NOAA
2. Positions determined and/or verified	J. Richard Faris, ENS. NOAA
3. Forms originated by Quality Control and Review Group and final review activities	

INSTRUCTIONS FOR 'METHOD AND DATE OF LOCATION' SECTION

NOTE: 'Photogrammetric Positions' are dependent entirely, or in part, upon control established by photogrammetric methods. 'Field Positions' are determined by field observations based entirely upon ground control.

COLUMN TITLE

TYPE OF ENTRIES

COMPILATION

Applicable to office identified and located objects only. Enter the number and date of the photograph used to identify the object.

FIELD INSPECTION AND

FIELD EDIT

1. New Position Determined—Enter the applicable data by symbols as indicated below:

F — Field	P — Photogrammetric	EXAMPLES:
1. Triangulation	1. Field identified	
2. Traverse	2. Theodolite	F. 3.c
3. Intersection	3. Planetable	
4. Resection	4. Sextant	P. 2
a. Theodolite		
b. Planetable		
c. Sextant		

Immediately beneath the data described above, enter the following:

a. For 'Field Positions' enter the date of location.
b. For 'Photogrammetric Positions' enter the date of field work; and, if a photograph was used in locating the object or the object was identified on a photograph, enter the number of the photograph used.

2. Triangulation Station Recovered — Enter 'Triang. Rec. mo/day/yr.'

3. Position Verified — Enter 'Verif. mo/day/yr.'

NOAA FORM 76-40 (2-71)		U.S. DEPARTMENT OF COMMERCE-NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	
PRESCRIBED BY PHOTOGRAMMETRY INSTRUCTION NO. 64.		NONFLOATING AIDS OR LANDMARKS FOR CHARTS	
<input checked="" type="checkbox"/> TO BE CHARTED <input type="checkbox"/> TO BE DELETED		ORIGINATING LOCATION NOAA Ship RAINIER	
		DATE 12-21-71	

The following objects have (have not) been inspected from seaward to determine their value as landmarks:

JOB NUMBER PH-		SURVEY NUMBER T - 11870 TP -		DATUM North American 1927		POSITION		METHOD AND DATE OF LOCATION (See instructions on reverse of this form)			CHARTS AFFECTED
STATE: California		DESCRIPTION		LATITUDE		LONGITUDE		FIELD INSPECTION	COMPILATION	FIELD EDIT	
CHARTING NAME				°	'	°	'				
				D.M. METERS		D.P. METERS					
Light #3	Oceanside Breakwater Flashing white every 4 sec	33°12'	22.399	117°24'	07.082			Triang. Rec. 10-71			C&GS 5101
Light #4	Fl. R. every 4 secs. Foghorn: 2 blasts every 20 secs.	33°12'	21.10	117°23'	55.444			F.3.a. 10-71			C&GS 5101
Daybeac. #8	Red triangular daymark	33°12'	27.61	117°23'	43.89			F.3.a. 10-71			C&GS 5101
Light #9	Qk. Fl. Green Black square daymark	33°12'	31.356	117°23'	41.752			Triang. Rec. 10-71			C&GS 5101
Light #6	Qk. Fl. Red 4 secs. Red triangular daymark	33°12'	24.511	117°23'	54.801			Triang. Rec. 10-71			C&GS 5101
Daybeac. #7	Black square daymark Red reflector	33°12'	54.237	117°24'	08.632			Triang. Rec. 10-71			C&GS 5101
Daybeac. #8	Red triangular daymark Red reflector	33°12'	49.416	117°24'	04.751			Triang. Rec. 10-71			C&GS 5101
Lighted Tower	Similar to lighthouse Beige with black roof Approx. 60' high	33°12'	17.04	117°23'	20.16			F.3.a. 10-71			C&GS 5101
VORTAC, Oceanside OCN	Top of conical antenna cover of air navigation building.	33°14'	26.15	117°25'	0.65			Triang. Rec. 10-71			C&GS 5101
			805.7		16.8						Checked by: WLS

RESPONSIBLE PERSONNEL	
TYPE OF ACTION	NAME
1. Objects inspected from seaward	J. Richard Farris, ENS. NOAA
2. Positions determined and/or verified	J. Richard Farris, ENS. NOAA
3. Forms originated by Quality Control and Review Group and final review activities	

INSTRUCTIONS FOR METHOD AND DATE OF LOCATION SECTION

NOTE: 'Photogrammetric Positions' are dependent entirely, or in part, upon control established by photogrammetric methods. 'Field Positions' are determined by field observations based entirely upon ground control.

COLUMN TITLE

TYPE OF ENTRIES

COMPLATION

Applicable to office-identified and located objects only. Enter the number and date of the photograph used to identify the object:

FIELD INSPECTION AND FIELD EDIT

1. New Position Determined - Enter the applicable data by symbols as indicated below:

F - Field

P - Photogrammetric

EXAMPLES:

- | | | |
|------------------|---------------------|--------|
| 1. Triangulation | 1. Field identified | F. 3.c |
| 2. Traverse | 2. Theodolite | |
| 3. Intersection | 3. Planetable | |
| 4. Resection | 4. Sextant | P. 2 |

- a. Theodolite
- b. Planetable
- c. Sextant

Immediately beneath the data described above, enter the following:

a. For 'Field Positions' enter the date of location.

b. For 'Photogrammetric Positions' enter the date of field work; and, if a photograph was used in locating the object or the object was identified on a photograph, enter the number of the photograph used.

2. Triangulation Station Recovered - Enter 'Triang. Rec. mo/day/yr.'

3. Position Verified - Enter 'Verif. mo/day/yr.'

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

TO BE CHARTED
~~TO BE REVISED~~
 TO BE DELETED

STRIKE OUT TWO

8 May, 1970

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

The positions given have been checked after listing by

G.H.E.

CDR. RAY E. MOSES

Chief of Party.

STATE	California	POSITION				METHOD OF LOCATION AND SURVEY No.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED	
		LATITUDE*		LONGITUDE*								DATUM
		D. M.	"	D. P.	"							
CHARTING NAME	DESCRIPTION	SIGNAL NAME	°	'	°	'	°	'	°	'		
✓ SOUTH JETTY LIGHT 2	Entrance light to Oceanside Harbor on the end of the new jetty--an extension of the South Jetty. It is listed as Light No. 360.25 in Vol. III, Light List of the Pacific Coast & Pacific Is. FL.R. 4.		33	12	21.2 653.	117	23	55.7 1442.	NA	1927	X	5101
					</							

This form shall be prepared in accordance with Hydrographic Manual, Publication 20.2, Sec. 1-55, 2-39, 6-36, 7-18 to 22 inclusive, and Fig. 79. Positions of charted landmarks and *nonfloating aids* to navigation, if redetermined, shall be reported on this form. Revisions shall show both the old and new positions. 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.

* TABULATE SECONDS AND METERS

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

~~TO BE CHARTED~~
TO BE REVISED
~~TO BE DELETED~~

STRIKE OUT TWO

19 May, 1970

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

The positions given have been checked after listing by H. W. H.

Ray E. Moses
CDR Ray E. Moses

Chief of Party.

[illegible]

This form shall be prepared in accordance with Hydrographic Manual, Publication 20.2, Sec. 1-55, 2-39, 6-36, 7-18 to 22 inclusive, and Fig. 79. Positions of charted landmarks and *nonfloating aids* to navigation, if redetermined, shall be reported on this form. Revisions shall show both the old and new positions. 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.

* TABULATE SECONDS AND METERS