TP-00610

TP-00610

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-7112.... *Map No.* TP-00610....

Classification No. Final *Edition No.* 1....
Field Edited Map

LOCALITY

State ....California....

General Locality ...Santa Catalina Island....

Locality ....Empire Landing....

....

19 72 TO 1975

REGISTRY IN ARCHIVES

DATE ....

☆ U.S. GOVERNMENT PRINTING OFFICE: 1974-762-901

18757
18758

(1)

NOAA FORM 76-36A (3-72) — U. S. DEPARTMENT OF COMMERCE, NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.

DESCRIPTIVE REPORT - DATA RECORD

TYPE OF SURVEY: [X] ORIGINAL [ ] RESURVEY [ ] REVISED

SURVEY TP-00610

MAP EDITION NO. (1)

MAP CLASS Field edited

JOB PH- 7112

PHOTOGRAMMETRIC OFFICE: Coastal Mapping Division, Rockville, Md.

OFFICER-IN-CHARGE: James Collins, Commander

LAST PRECEEDING MAP EDITION

TYPE OF SURVEY: [ ] ORIGINAL [ ] RESURVEY [ ] REVISED

JOB PH-

MAP CLASS

SURVEY DATES: 19__ TO 19__

I. INSTRUCTIONS DATED

1. OFFICE	2. FIELD
Aerotriangulation - August 1972 Compilation - November 1973 Amendment I - January 1974 Amendment II - February 1974	February 1972

II. DATUMS

1. HORIZONTAL: [X] 1927 NORTH AMERICAN — OTHER (Specify)

2. VERTICAL: [X] MEAN HIGH-WATER [ ] MEAN LOW-WATER [X] MEAN LOWER LOW-WATER [ ] MEAN SEA LEVEL — OTHER (Specify)

3. MAP PROJECTION: Polyconic

4. GRID(S): STATE: California; ZONE: 6

5. SCALE: 1:20,000 — STATE: ; ZONE:

III. HISTORY OF OFFICE OPERATIONS

OPERATIONS		NAME	DATE
1. AEROTRIANGULATION METHOD: Analytic	BY	I. O. Raborn	12/73
	LANDMARKS AND AIDS BY		
2. CONTROL AND BRIDGE POINTS METHOD: Coradomat	PLOTTED BY	D. Phillips	12/73
	CHECKED BY		
3. STEREOSCOPIC INSTRUMENT COMPILATION INSTRUMENT: Wild B-8 SCALE: 1:15,000	PLANIMETRY BY	S. Solbeck	5/74
	CHECKED BY	P. Dempsey	5/74
	CONTOURS BY	Inapplicable	
	CHECKED BY	Inapplicable	
4. MANUSCRIPT DELINEATION METHOD: SCALE: 1:20,000	PLANIMETRY BY	S. Solbeck	6/74
	CHECKED BY	P. Dempsey	6/74
	CONTOURS BY	Inapplicable	
	CHECKED BY	Inapplicable	
	HYDRO SUPPORT DATA BY	S. Solbeck	6/74
	CHECKED BY	J. P. Battley, Jr.	7/74
5. OFFICE INSPECTION PRIOR TO FIELD EDIT	BY	J. P. Battley, Jr.	7/74
6. APPLICATION OF FIELD EDIT DATA	BY	F. Wright	6/76
	CHECKED BY		
7. COMPILATION SECTION REVIEW	BY		
8. FINAL REVIEW	BY	J. B. Phillips	8/76
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH	BY		9/76
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH	BY	S. Blankenbaker	9/76
11. MAP REGISTERED - COASTAL SURVEY SECTION	BY	R. Cotter	11/76

NOAA FORM 76-36A — SUPERSEDES FORM C&GS 181 SERIES

* U.S. G.P.O. 1972-769382/582 REG.#6

NOAA FORM 76-36B
(3-72)

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

TP-00610

COMPILATION SOURCES

1. COMPILATION PHOTOGRAPHY

CAMERA(S): Wild RC-8 "L"

TYPES OF PHOTOGRAPHY LEGEND
(C) COLOR
(P) PANCHROMATIC
(I) INFRARED

TIME REFERENCE
ZONE: 8th [X] STANDARD
MERIDIAN: 120th [ ] DAYLIGHT

TIDE STAGE REFERENCE
[X] PREDICTED TIDES
[ ] REFERENCE STATION RECORDS
[X] TIDE CONTROLLED PHOTOGRAPHY

	NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE
	72L(C)-2721 - 2728	3/24/72	09:39	1:30,000	1.5 ft. above MLLW.
*	72L(I)-2774 - 2781	3/24/72	11:04	1:30,000	+0.2 ft. of MLLW
*	72L(I)-2811 (with TP-00608)	3/24/72		1:30,000	
*	72L(I)-2783	3/24/72		1:30,000	
**	72L-2693 - 2699	3/24/72		1:15,000	
**	72L-2672	3/24/72		1:30,000	

REMARKS

* - Tide controlled photography ** - Photo-hydro support photography.

2. SOURCE OF MEAN HIGH-WATER LINE:

The mean high water line was delineated from the above listed photographs. Models from the above listed color photography were set on the B-8 stereoplotter.

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

The mean lower low water line was compiled from the infrared photographs listed [illegible]

(3)

NOAA FORM 76-36C
(3-72)

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

TP-00610

HISTORY OF FIELD OPERATIONS

I. [X] FIELD INSPECTION OPERATION [ ] FIELD EDIT OPERATION

OPERATION		NAME	DATE
1. CHIEF OF FIELD PARTY		R. Melby	3/72
2. HORIZONTAL CONTROL	RECOVERED BY	R. Melby	3/72
	ESTABLISHED BY	None	
	PRE-MARKED OR IDENTIFIED BY	L. Riggers	3/72
3. VERTICAL CONTROL	RECOVERED BY	Inapplicable	
	ESTABLISHED BY	Inapplicable	
	PRE-MARKED OR IDENTIFIED BY	Inapplicable	
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 [ ] COMPLETE [ ] SPECIFIC NAMES ONLY [XX] NO INVESTIGATION	BY	
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY		
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY	Inapplicable	

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED

2. VERTICAL CONTROL IDENTIFIED
Inapplicable

PHOTO NUMBER	STATION NAME
72L(C)2725	Lone Tree, 1876
72L(C)2726	East Peak, 1876

PHOTO NUMBER	STATION DESIGNATION

3. PHOTO NUMBERS *(Clarification of details)*

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED

PHOTO NUMBER	OBJECT NAME

PHOTO NUMBER	OBJECT NAME

5. GEOGRAPHIC NAMES: [ ] REPORT [X] NONE

6. BOUNDARY AND LIMITS: [ ] REPORT [X] NONE

7. SUPPLEMENTAL MAPS AND PLANS

8. OTHER FIELD RECORDS *(Sketch books, etc.* DO NOT *list data submitted to the Geodesy Division)*

★U. S. GOVERNMENT PRINTING OFFICE: 1973--768074/1057 REGION NO. 6

NOAA FORM 76-36C
(3-72)

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

TP-00610

HISTORY OF FIELD OPERATIONS

I. ☐ FIELD INSPECTION OPERATION ☒ FIELD EDIT OPERATION

OPERATION		NAME	DATE
1. CHIEF OF FIELD PARTY		C. K. Townsend, Cdr.	3/75
2. HORIZONTAL CONTROL	RECOVERED BY		
	ESTABLISHED BY		
	PRE-MARKED OR IDENTIFIED BY		
3. VERTICAL CONTROL	RECOVERED BY		
	ESTABLISHED BY		
	PRE-MARKED OR IDENTIFIED BY		
4. LANDMARKS AND AIDS TO NAVIGATION	RECOVERED *(Triangulation Stations)* BY		
	LOCATED *(Field Methods)* BY	K. Andreen, Ens.	3/75
	IDENTIFIED BY	K. Andreen, Ens.	3/75
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION ☐ COMPLETE ☐ SPECIFIC NAMES ONLY ☐ NO INVESTIGATION — BY		
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY	K. Andreen, Ens.	3/75
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY		

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED

PHOTO NUMBER	STATION NAME

2. VERTICAL CONTROL IDENTIFIED

PHOTO NUMBER	STATION DESIGNATION

3. PHOTO NUMBERS *(Clarification of details)*
72L2692-2700
72L2672

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED

PHOTO NUMBER	OBJECT NAME

PHOTO NUMBER	OBJECT NAME

5. GEOGRAPHIC NAMES: ☐ REPORT ☐ NONE

6. BOUNDARY AND LIMITS: ☐ REPORT ☐ NONE

7. SUPPLEMENTAL MAPS AND PLANS

8. OTHER FIELD RECORDS *(Sketch books, etc.* **DO NOT** *list data submitted to the Geodesy Division)*
Cronaflex copy of T-Sheet labeled, master index, containing field information.

★U. S. GOVERNMENT PRINTING OFFICE: 1973--768074/1057 REGION NO. 6

(5)

NOAA FORM 76-36D
(3-72)

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

TP-00610

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	June '74	Class III manuscript		
Field Edit Applied	June '76	Class I manuscript		7-12-76 PMC

II. LANDMARKS AND AIDS TO NAVIGATION

1. REPORTS TO MARINE CHART DIVISION, NAUTICAL DATA BRANCH

NUMBER	CHART LETTER NUMBER ASSIGNED	DATE FORWARDED	REMARKS
1	Aid	9-03-76	Form 76-40

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~~ 76-40 SUBMITTED BY FIELD PARTIES.
3. ☒ SOURCE DATA *(except for Geographic Names Report)* AS LISTED IN SECTION II, NOAA FORM 76-36C. ACCOUNT FOR EXCEPTIONS:

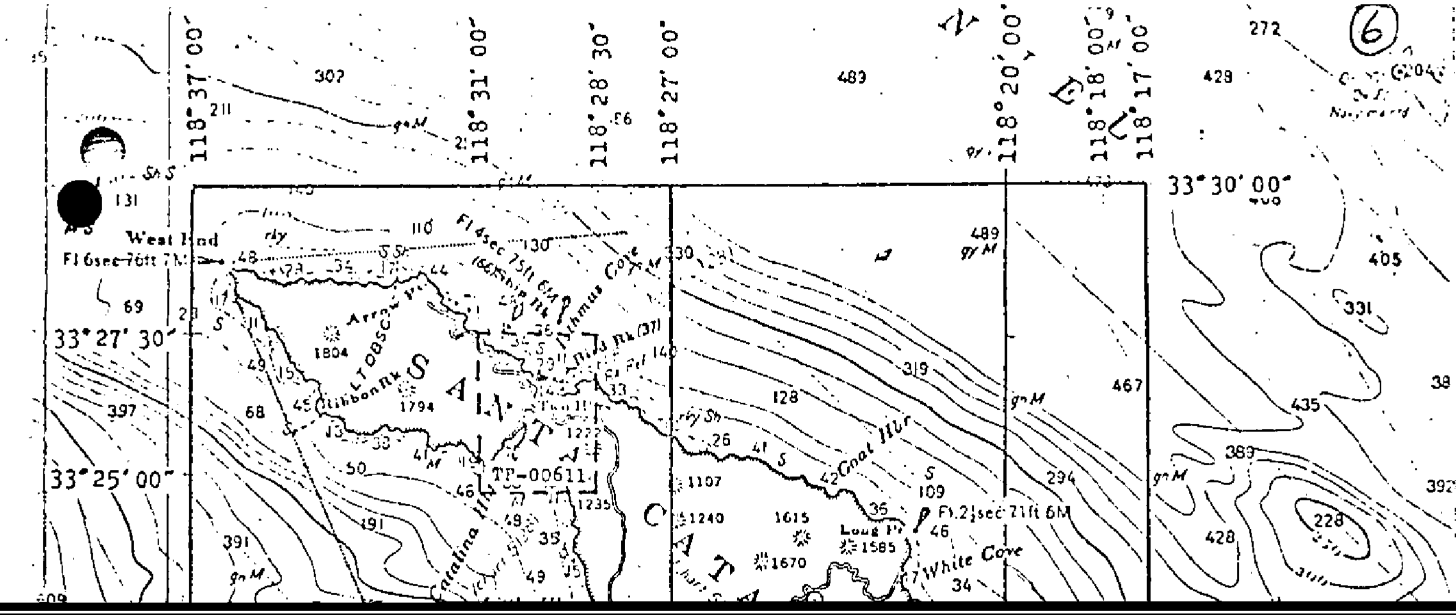
4. ☐ DATA TO FEDERAL RECORDS CENTER. DATE FORWARDED: _____

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

	SURVEY NUMBER	JOB NUMBER	TYPE OF SURVEY
SECOND EDITION	TP - _____ (2)	PH - _____	☐ REVISED ☐ RESURVEY
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	MAP CLASS ☐II. ☐III. ☐IV. ☐V. ☐FINAL
THIRD EDITION	SURVEY NUMBER	JOB NUMBER	TYPE OF SURVEY
	TP - _____ (3)	PH- _____	☐ REVISED ☐ RESURVEY
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	MAP CLASS ☐II. ☐III. ☐IV. ☐V. ☐FINAL
FOURTH EDITION	SURVEY NUMBER	JOB NUMBER	TYPE OF SURVEY
	TP - _____ (4)	PH - _____	☐ REVISED ☐ RESURVEY
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	MAP CLASS ☐II. ☐III. ☐IV. ☐V. ☐FINAL

NOAA FORM 76-36D

★U. S. GOVERNMENT PRINTING OFFICE: 1973--778075/1077 REGION NO. 6



6
118° 37' 00"
118° 31' 00"
118° 28' 30"
118° 27' 00"
118° 20' 00"
118° 18' 00"
118° 17' 00"
33° 30' 00"
33° 27' 30"
33° 25' 00"
West End
Fl 6sec 76ft 7M
Arrow Pt
Isthmus Cove
Ribbon Rk
Goat Hbr
Long Pt
White Cove
Fl 2½sec 71ft 6M
TP-00611

(7)

Summary PH-7112

TP-00610 is one of 5 shoreline maps in job PH-7112 compiled for use in contemporary hydrographic survey and nautical charting operations.

Field work, prior to compilation, consisted of the recovery and pre-marking of horizontal control.

The manuscript was compiled using the Wild B-8 stereoplotter with 1:30,000 scale color photography. Infrared photography was used to graphically compile the mean lower low water line. Cronaflex positives and ozalids of the manuscript were forwarded for the use of the field editor and for the preparation of the hydrographer's boat sheets. Accompanying these were specially prepared ratio photographs to aid in the location of hydrographic signals.

Field edit was accomplished during Spring and Fall 1975

Final review was accomplished at the Rockville, Maryland office in Aug. 1976.

[redacted]

FIELD INSPECTION

TP- 00610

There was no field inspection prior to compilation. Field work accomplished was limited to the recovery and identification of the horizontal control necessary for the aerotriangulation of the project.

PHOTOGRAMMETRIC PLOT REPORT
Santa Catalina Island
California
Job PH-7112
December 1973

21. AREA COVERED

The area covered by this report pertains to Santa Catalina Island of California. The island is covered by three 1:20,000 scale sheets, TP-00608, TP-00609, TP-00610, and two 1:5,000 scale sheets TP-00611, and TP-00612.

22. METHOD

Three strips of 1:30,000 scale color photography and three strips of 1:15,000 scale color photography were bridged by analytic aerotriangulation methods. Sketch number 1 shows the flight lines of the photography and the placement of the control used in the adjustment. The three strips of 1:30,000 scale color photography were controlled by field identified control paneled in 1972. The three strips of 1:15,000 scale color photography were controlled by common points from the 1:30,000 scale color photography. Ties were made between all bridging strips. Common points were located between the bridging photography and the infrared photography to determine the ratio scale. In addition, common points were located on the hydro support color photography to determine the ratio scale. Sketch number 2 shows the flight lines of the hydro-support photography.

Data for ruling projections were furnished to the Coradomat to be plotted on the California Zone 6 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

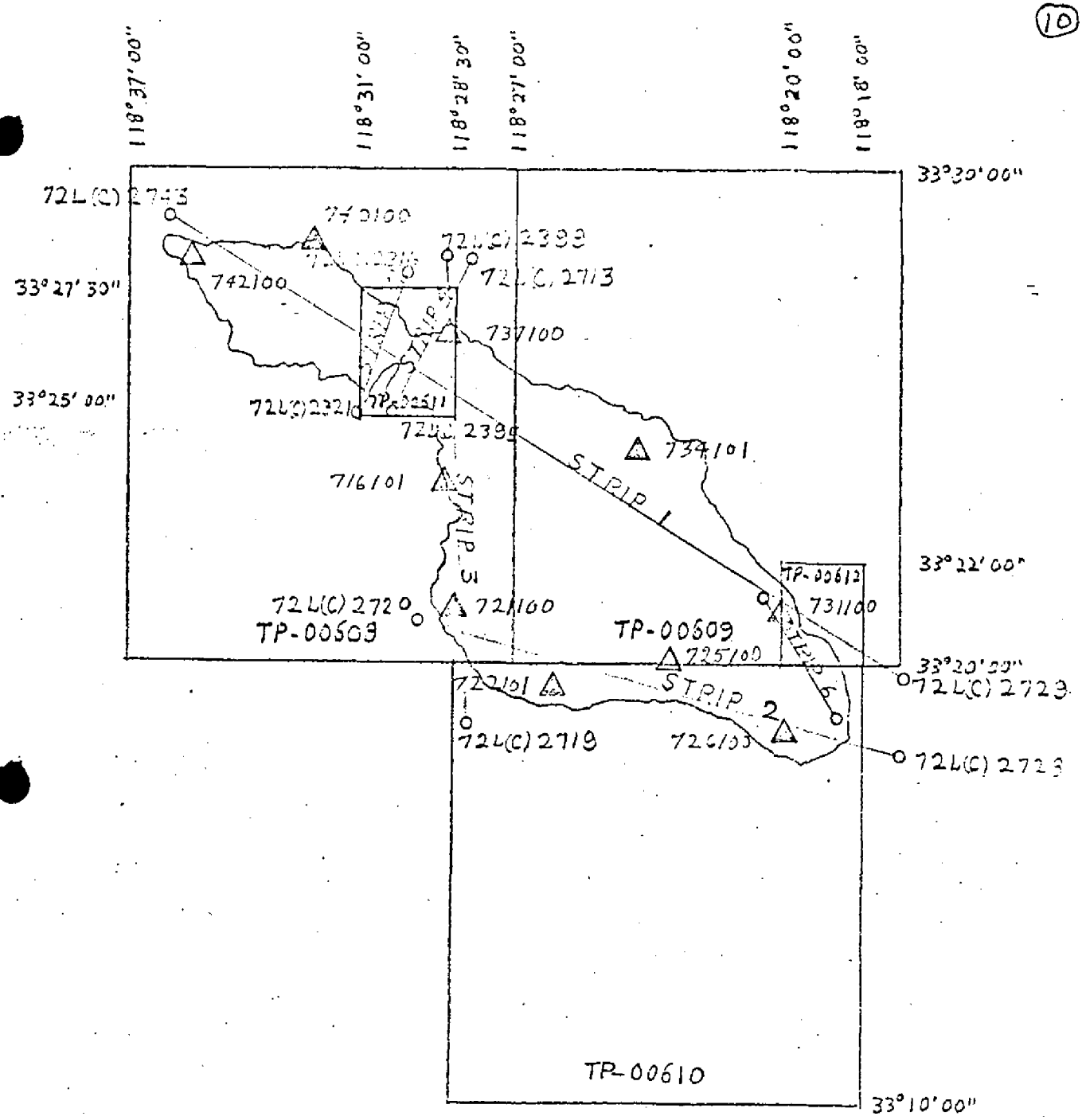
The photography was adequate as to overlap and definition.

Respectfully submitted,

Ivey O. Raborn

Approved and Forwarded:

John D. Perrow, Jr.
Chief, Aerotriangulation Section

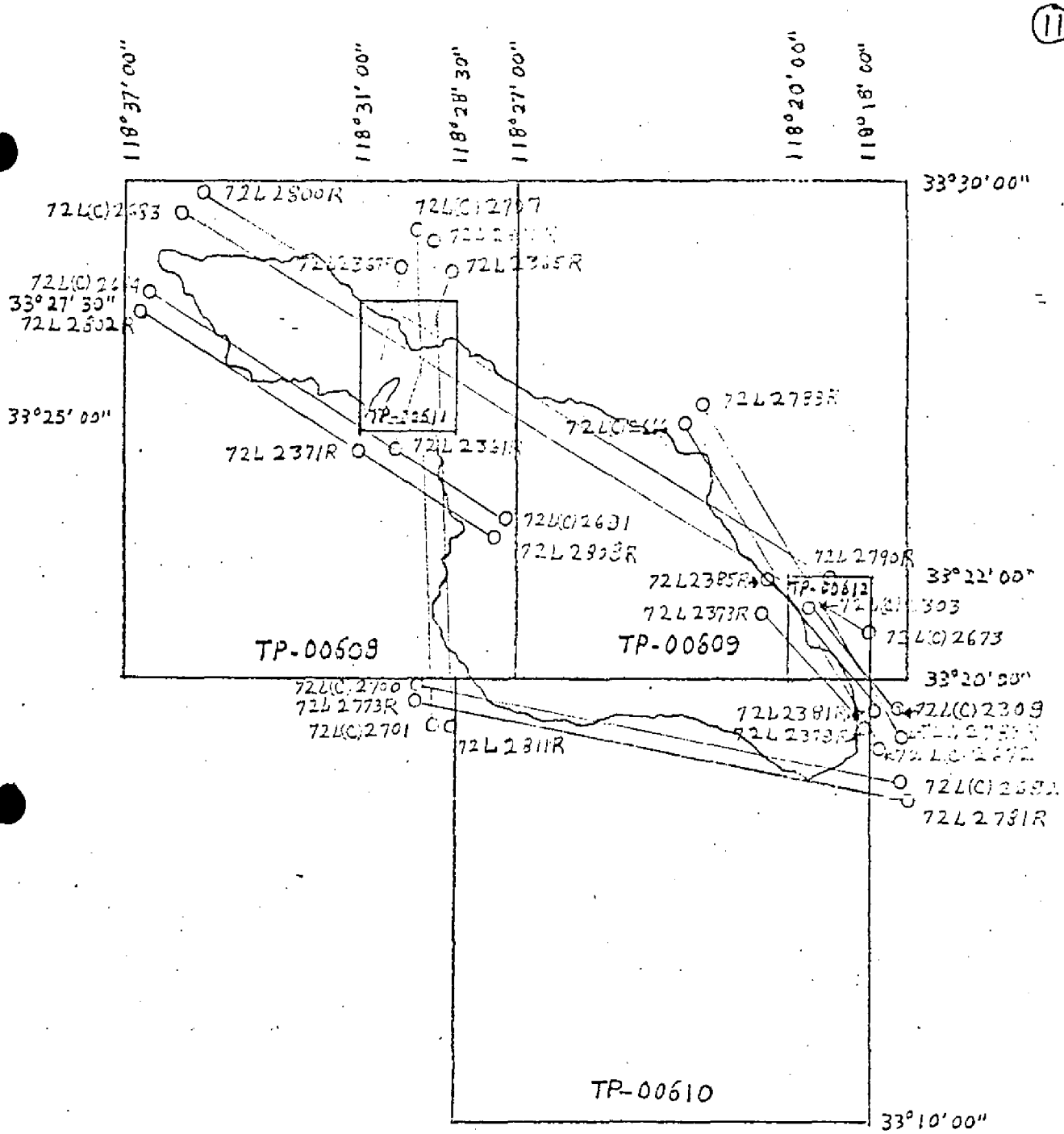


JOB PH-7112

SANTA CATALINA ISLAND

CALIFORNIA

SKETCH # 1



JOB PH-7112

SANTA CATALINA ISLAND

CALIFORNIA

SKETCH # 2

Compilation Report
TP-00610
Scale 1:20,000

June 1974

31. Delineation

Delineation was by the Wild B-8 stereoplotter using color photography taken in March 1972. Points common to the photography to be used for photo-hydro support and the MLLW photography were dropped on the B-8 and pricked on cronapaque black-and-white ratio prints of the color flown for photo-hydro support. Compiled features were roads, drainage features, landmarks (culture and physical) and the tops of bluffs considered to be of landmark value.

32. Control

See the attached Photogrammetric Plot Report, dated December 1973.

33. Supplemental Data - None

34. Contours and Drainage

Contours are not applicable to the project. Drainage was delineated by the Wild B-8 stereoplotter and by office interpretation of the photographs.

35. Shoreline and Alongshore Details

Delineation was by the Wild B-8 stereoplotter and office interpretation of the 1972 color photographs.

The MHW lin e was compiled using the same methods. The eastern most shoreline (from Jewfish Point to Seal Rocks) was not covered adequately by the above color photographs and was compiled graphically. Some alongshore rocks were deleted due to the large number of rocks to avoid confusion.

The MLLW line was compiled graphically from tide-coordinated, infrared photography.

36. Offshore Details

No unusual problems were encountered.

37. Landmarks and Aids

One aid to navigation was located and plotted by the Wild B-8 stereoplotter. Other aids or landmarks will be located during field edit.

38. Control for Future Surveys - None

39. Junctions

See the attached Form 76-36b, item #5 of the Descriptive Report concerning junctions.

40. Horizontal and Vertical Accuracy

This map complies with the National Standard of Accuracy.

41. thru 45. Inapplicable

46. Comparison with Existing Maps

All work was compared to the existing 7.5 minute quads:

(a) Santa Catalina East, California 1:24,000 1943
(b) Santa Catalina South, California 1:24,000 1943

47. Comparison with Nautical Charts

All work was compared with the existing National Ocean Survey chart 5112, 5th Edition, October 7, 1972, during the B-8 compilation. This chart, originally printed at 1:40,000 scale, was enlarged to 1:20,000 scale for this purpose.

The tops of bluffs were also compared to this chart, but many were deleted because the project instructions called for vertical bluffs only.

Submitted by:

Stephen H. Solbeck

Approved and Forwarded by:

Peter P. Battley Jr

Chief, Coastal Mapping Section

(14)

FIELD EDIT REPORT

OPR-411-RA-1975 SPRING

SANTA CATALINA ISLAND

CALIFORNIA

TP-00608 thru TP-00612

NOAA Ship RAINIER

CDR Charles K. Townsend

Commanding

(15)

INTRODUCTION

The field edit of the spring project, OPR-411-RA-75, Santa Catalina Island, was started on Feb. 25, 1975 and complete on March 13, 1975. The maps were compiled without field inspection pior to compilation, therefore, a complete and thorough field edit was done. Work was carried out on shore and water.

Field edit was started at the east end of the island continued up the north side to the west end. Only the northeast side of the island was field edited.

All deletions, additions and corrections to be applied to the manuscript appear on the T-sheets. All questions on the field edit ozalids were answered on the T-sheets. The T-sheet is an index of all field edit work performed. All field edit notes on the T-sheets that are violet are items verified, those in red ink are changes. All notes on the T-sheet which are identified on the photographs, include the description, height and the photo number that it was located on. All other information is on the photographs, written in violet ink.

For a listing of photographs used, refer to the Separates following the text. Height data on all rocks are estimated. Times were referenced to 0 Longitude.

ADEQUACY OF COMPILATION

The compilation of the manuscripts were adequate and complete. Compilation of MHWL and MLLW were excellent. There were a few minor

discrepancies, and these are noted in the Shoreline Summaries. All rocks and offshore features are labeled on the T-sheet, and wherever possible, verified on the photographs.

SHORELINE SUMMARIES

TP-00610

Field edit was started at the east end of Santa Catalina Island. Everything NE of 33 21' 10"N, 118 18' 48"W was field edited, while nothing was done SW of that point.

TP-00609

At 33 21' 10"N, 118 19' 39"W to 33 21' 22"N, 118 19' 47"W there is a change to the shoreline as compiled due to construction. Refer to TP-00612 for further information.

The microwave tower located on the compiled manuscript as 33 21' 23.9"N, 118 21' 30.6"W, is not in the correct position. A copy of a letter from the Pacific Telephone and Telegraph Co. which gives the correct position of this tower to the nearest second, is included in the seperates which follow the text. This new position is 33 21' 00"N, 118 21' 05"W.

A wreck, located in the vicinity of 33 23' 50"N, 118 22' 00"W, was searched for but not found. However, the search method was wire dragging in an area foul with kelp. It would have been very easy to have missed the wreck, thus this search was not adequate.

TP-00608

The shoreline of Ship Rock on this T-sheet was used for the final smooth sheet. It's exact shape was difficult to determine due to the

triangulation symbol of Bird Rock 1875, covering the shoreline.

Along the coast from Lion's Head to Arrow Point, there are several submerged rocks, usually 2' to 6' under, about 30 yds. off the beach.

Ship Rock Light was located by measuring it's distances from the Bird Rock 1875 triangulation station and its reference marks. Sextant angles were used as a check of its position. Refer to the Separates following the text for the computations of the position of this light.

West End Light was verified but not located. The field edit ended at the tip of the west end of Santa Catalina Island, 33° 28' 44"N, 118° 36' 23"W.

TP-00611

There are floating docks connected to the pier in Isthmus cove according to the compiled manuscript. These can be changed to the end of the pier and lengthened, depending on the need during the summer.

In Fisherman Cove, there is a railway located at 33° 26' 40"N, 118° 28' 58"W. The pier shown on the T-Sheet in this cove has been verified, but does not appear on Chart 5128. This pier should be charted.

The foul area next to Ship Rock should be delineated from the 1:5000 photographs. It is shown on photo 72L2398.

The "Chimney Stack" in Cherry Cove should be re-named to "Tower". It is actually a lifeguard stand.

TP-00612

The shoreline from 33° 21' 11"N, 118° 19' 40"W to 33° 21' 22"N,

118 19' 48"W, has changed completely since the 1972 photographs were taken and the shoreline was compiled. This area is under construction by the Balboa Bay Island Club, of Newport Beach, CA. They are building condominiums, and are filling in the coastline with dirt. Since the shoreline will be continuously changing until the construction is finished, an accurate location of the coastline was not compiled by the field editor. It is recommended that plans be obtained from the Balboa Bay Island Club for landscaping or that new photographs be taken when the construction is finished.

Pier ruins do exist at the end of the pier at 33 21' 03"N.

There are nets located from 118 19' 25"W to 118 19' 35"W, just north of the Casino, during the summer only. This is a scuba diving area.

Also nets and swim lines are located about 30 yds off the beach in Descanso Bay. These are located in Avalon Bay, also, from about 33 20' 35"N to 33 20' 43"N. Platforms are continuously changing positions throughout the Bay area.

The small dock on Cabrillo Mole Penninsula no longer exists. There are pier ruins where it did stand (pilings).

The Avalon Bay Marker, R. Bcn., is located at the top of the Casino. The Avalon Bay Lights 1 and 2, were located by both theodolites and tellurometers. Refer to both the Separates following the

ADDITIONAL INFORMATION

Photo identified signals used for visual hydrography are circled in violet ink on the two 1:5000 T-sheets (TP-00611 and TP-00612) and on all photographs in which they appear. Each signal is identified with its signal number (either a 200 or 300 number). All 100 series signals are triangulation stations.

On the RA-5-2-75 boatsheet, TP-00611, one signal has two signal numbers (#243/303). Due to problems in the software of the visual hydro programs, RK171 and RK174. The digital sextant could not accept an input of any signal number which had its last two digits larger than 39. Thus signal numbers are from 200-239, 300-320, with the exception of signal number 243/303.

All 200 and 300 signal are photo located except for #318, 319 and 320. These were located by means of sextant angles to triangulation stations. Refer to the seperates following the text for the computation of the location of these signals.

The computation of Ship Rock Light can also be found in the Separates that follow the text.

RECOMMENDATIONS

There were two problems involving the signal control on the T-sheet TP-00612 (boatsheet RA-5-1-75). It was extremely difficult to locate enough photo identifiable objects for signals using the black and white photographs that were provided. It is recommended that if a 1:5000 boatsheet is to be done using visual methods, color photographs be supplied instead of or in addition to the black and white, so that objects can be more easily identified, thus obtaining

stronger control.

Also it is recommended that several photographs which include the boundary limits of a 1:5000 survey and some area beyond these limits, are sent to the field editor. Near the NW edge of the RA-5-2-75 boatsheet, signals 318, 319 and 320 had to be located by hydro methods since there wasn't enough photo support in this area.

DATA PROCESSING

The computations for the signals and the positions of the lights were done on the ship's PDP8/e computer and the Wang 700 Series Advanced Programing Calculator. The following programs were used for the computations that are included in the Separates that follow the text.

Program	Description
RK 301	Visual Station Table Maker (VISTA) Ver: 12 Aug. 1974
RK 407	Geodetic Direct & Inverse Comp Ver: 10 Nov. 1972
RK 409	Geodetic Utility Package Ver: 5 Sept. 1973
Focal Scaling Program	Author: R.A. Schiro 13 Aug. 1973
Wang Intersection	
Wang Resection	

Respectfully submitted,

Kathryn A. Andreen

Kathryn A. Andreen
ENS. NOAA

(21)

MANUSCRIPT-PHOTO INDEX

T-SHEET	PHOTOS
TP-00608	72L2677-2682 72L2685
TP-00609	72L2666-2671 72L2673-2677 & 2707
TP-00610	72L2672
TP-00611	72L2316-2318 72L2396-2398
TP-00612	72L2303-2307

(22)

THE PACIFIC TELEPHONE AND TELEGRAPH COMPANY

Avalon, California
February 26,1975

Commander Charles Townsend
MSS 21
NOAA Rainier

Dear Sir:

The attached copy of an FCC document indicates the location of our transmitting tower at Dakin Peak. Catalina Island,2 mi. WNW of Avalon.

Lat. 33° 21' 00'' N and Long. 118° 21' 05'' W is the recorded location

The flashing red beacon light atop the tower is in operation 24 hours a day and is located 1792 feet AMSL.

Corrections to existing charts may be in order.

Sincerely,

Stan Royle

Stan Royle
Equipment Supervisor
Pacific Telephone Company
Box 496
Avalon, Calif 90704

1. CO
2. XO
3. CH ENG
4. NAV
5. FLD OPR BLK
6. ELECT
7. SH OFF
8. W. R.
9. FIELD EDIT

FORM 477
1956

FEDERAL COMMUNICATIONS COMMISSION

(23)

RADIO STATION LICENSE

COMMON CARRIER

NT TO POINT MICROWAVE
(Nature of service)

Fixed
(Class of Station)

THE PACIFIC TELEPHONE AND TELEGRAPH COMPANY

Subject to the provisions of the Communications Act of 1934, subsequent acts, and treaties, and all regulations tofore or hereafter made by this Commission, and further subject to the conditions and requirements set forth in license, the licensee hereof is hereby authorized to use and operate the radio transmitting facilities herein-described for radio communication for the term beginning July 27, 1961, ending February 1, 1966.
(3 a. m. eastern standard time)

Peak ORIGINAL POSTED AT
WNW of Avalon, (Los Angeles) California. Lat. 33 21 00 N. Long. 118 21 05 W.
(Location of station)

(Location of authorized control point)

425 West Fifth Street, San Pedro, California.
(Location of alarm center)

TRANSMITTING EQUIPMENT

FREQUENCIES (Mc)	POINTS OF COMMUNICATION AND DISTANCE IN KILOMETERS	DEGREES OF AZIMUTH OF CENTER OF MAIN LOBE OF RADIATION WITH RESPECT TO TRUE NORTH DEGREES	MINUTES
		06	59
		204	29

Continued use of 928.5 & 929.5 Mc and REL transmitters is authorized until September 1, 1961 only. Extended to 11-29-61 per telegram REL EQ REMOVED. (when

Upon notice from the Commission, the use of the frequency diversity shall be forthwith terminated without hearing if, in the discretion of the Commission, such action is warranted.

NUMBER OF TRANSMITTERS	MANUFACTURER AND TYPE	EMISSION	AUTHORIZED POWER (Watts) OUTPUT
(4).	Collins, type 552A-6	F0, 15000F2, 15000F3, 15000F4, 15000F9	0.1

Obstruction Marking Specifications in accordance with Paragraphs 1, 3, 11 and 21 of FCC Form 715. 1792

Operation of this Station is governed by Part 21 of the Commission's Rules.

This license is issued on the licensee's representation that the statements contained in licensee's application are true and that the undertakings therein contained, so far as they are consistent herewith, will be carried out in good faith.

APPROVAL SHEET

FIELD EDIT

OPR-411-RA-1975

The field work and data were examined daily in the field. Standard procedures were observed in accordance with the Hydrographic Manual, PMC OPORDER, the Topographic Manual and Photogrammetry Instructions.

The T-sheets and the accompanying records have been examined by me and are considered complete and adequate for charting purposes and are approved.

Charles K. Townsend
CDR. NOAA

FIELD EDIT REPORT

OPR-411-RA-1975-FALL

SANTA CATALINA ISLAND

CALIFORNIA

TP-00608 thru TP-00611

NOAA Ship RAINIER

CDR. Charles K. Townsend

Commanding

INTRODUCTION

The field edit for the fall project, OPR-411-RA-75, Santa Catalina Island, was started on Sept. 14 (J.D. 257) and finished on Oct. 15, 1975 (J.D. 288). Since the maps were compiled without field inspection prior to compilation, a complete and thorough field edit was carried out on land and water.

Field edit began in Catalina Harbor, (TP-00611, 1:5000 T-sheet) and was then extended throughout the southwest side of the island. Junctions were made with the RAINIER's spring project (OPR-411-RA-75) field edit at both the west and east ends.

All deletions additions and corrections to be applied to the manuscript appear on the master T-sheets. All questions on the field edit ozalids were answered on the master T-sheets. The master T-sheet is an index of all field edit work performed. All field edit notes on the T-sheets that are in violet ink are items verified, those in red ink are changes. All notes on the T-sheets which are identified on the photographs, include the description, height and the photo number that they were located on. All other information is on the photographs, written in violet ink. All field edit notes on the smooth RA-5-3-75 boatsheets which are verified are in black ink, changes that are photo-located are in violet ink, changes to the manuscript (not photo-located) are in red, and unverified item are in blue ink. (Note: All field edit information for the chart adequacy survey, RA-40-1-75, smooth boatsheet, can be found on the master index T-sheets TP-00608,

TP-00610, TP-00611 and the photograph 72L2319, 1:5000.)

For a listing of photographs used, refer to the Separates following the text. Height data on all rocks are estimated, plus or minus 1/4 ft. Times were referenced to 0° Longitude.

ADEQUACY OF COMPILATION

The compilation of the manuscripts were adequate and complete. Compilation of the MHWL and the MLLW were excellent. There were many discrepancies between the photo compiled T-sheets and the

[redacted]

shoreline. In all cases, it was found that the T-sheets were compiled correctly. All rocks and offshore features are labeled on the T-sheet, and wherever possible, verified on the photographs.

SHORELINE SUMMARIES

TP-00608

Field edit started on this T-sheet at the west end of Santa

field edit information which did not fall within the limits of TP-00611, and were not scaled down to fit the 1:20,000 T-sheet TP-00608.

A new geographic name should be added to the chart, "Shark Harbor". It is the harbor that is located at approximately 33° 23' 00"N, 118° 28' 20"W. "Little Harbor" should be changed to the cove north of "Shark Harbor", located at 33° 23' 10"N, 118° 28' 25"W.

West End Light (33° 28' 42.826"N, 118° 36' 17.546"W) was located by using sextant angles between the Light and Eagle Rock, taken from a hydro launch with Raydist control positioning. Refer to the Horizontal Control Report, OPR-411-RA-75-FALL, for specific details on the procedures used.

TP-00611

There are large discrepancies around Catalin Head and on the southeastern limit of the T-sheet, with minor ones throughout the rest of the area, between the Chart blow-up and the T-sheet. The T-sheet was found to be correct.

The field edit using the 1:5000 photographs was carried out beyond the western limit of the T-sheet. This field edit was not scaled off to the 1:20,000 manuscripts, but was left on the photo 72L2319. This information needs to be processed and added to the master T-sheet (TP-00608) and the smooth boatsheets.

The question of pier ruins at 33° 25' 55"N, 118° 30' 27"W, is

actually an airplane ramp. Air Catalina Airlines flys float-planes in and out of the harbor twice daily, 0830 and 1630 local time.

No evidence could be found of any pier ruins at 33° 25' 55"N, 118° 30' 24"W. The only things found in this area were several submerged rocks, which divers verified.

A gravel ramp for boats is located at 33° 26' 08"N, 118° 30' 07"W.

A new pier was constructed after the T-sheet was compiled. Its approximate location (33° 25' 58"N, 118° 30' 07"W) is noted on the T-sheet.

At Ballast Point, a seasonal floating pier was added onto the existing pier (refer to the T-sheet).

The platform located at 33° 25' 44"N, 118° 30' 22"W, is seasonal and did not exist at the time of the survey.

All kelp areas were delineated properly. Additions to foul areas with rocks are noted on the T-sheet.

TP-00610

One area of rocks and boulders (33° 19' 08"N, 118° 26' 31"W), as compiled on the T-sheet, was searched for and not found. This area could be identified easily on the photographs, however when investigated at low water, nothing could be found.

Another small area of rocks on the manuscripts (33° 19' 07"N, 118° 25' 52"W) was also searched for and not found. This area was thick with kelp, but the field editors could not find anything.

Local fishermen were also contacted, they had not found anything in that area, either.

The position for Catalina Island East End Light is correct as compiled. The field editor was unable to measure off the Light's position for a revised 76-40, Nonfloating Aids to Navigation. It is recommended that CAM 521 complete a new 76-40.

ADDITIONAL INFORMATION

Photo identified signals used for visual hydrography are circled in violet ink on the 1:5000 T-sheet, TP-00611, and on all photographs in which they appear. Each signal is identified with its signal number (a 400 number.) All other signal numbers indicate other control locating methods.

NOTE: The field edit for the Long Beach area, OPR-411-RA-75-FALL, (boatsheet RA-10-2-75) was not accomplished by the personnel of the RAINIER. Refer to the Chart Adequacy Survey, OPR-511-DA-75, Report, for field edit on this boatsheet.

DATA PROCESSING

The computations for the positions of signals were done on the Ship's PDP 8/e computer and the Wang 700 Series Advanced Programing Calculator. The following programs were used for the computations that are included in the Separates that follow the text.

Program	Description
RK 301	Visual Station Table Maker (VISTA) Ver: 12 Aug. 1974

[redacted]

RECOMMENDATIONS

As seen in this project and in many other projects, there has been a lack of good quality photographs. Perhaps the cost of photographs that are needed for photo-picking signals should be compared to the cost of locating signals by horizontal control, since the photographs received by this ship are about 60% effective. The experience the field editor has for photo-picking signals is usually quite limited, thus extremely good quality photos are needed to locate signals within the limits set by the Hydro Manual.

Photo signals east of Pin Rock on the 1:5000 visual survey (RA-5-3-75), were impossible to pick. The photographs were out of focus and were covered with the glare from the sun off the water, i.e., 72L2319. Also there were not enough photo coverage at the edges of the survey limits, for good intersections of positioning rays. The photographs have also been only black and white, not the color originals, which cuts the effectiveness

not be taken for the purpose of photo-picking signals by personnel on board the ships, then do not expect them to be used for that purpose or send an expert into the field to support the ships.

Respectfully submitted,

Kathryn Andreen

Kathryn Andreen, Ltjg. NOAA

Manuscript-Photo Index

T-Sheet	Photographs
TP-00608	72L2681-91 72L2701-06
TP-00610	72L2692-2700
TP-00611	72L2317-20 72L2395-97

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Approval Sheet

Field Edit

OPR-411-RA-1975-FALL

The field work and data were examined daily in the field. Standard procedures were observed in accordance with the Hydrographic Manual, PMC OPORDER, the Topographic Manual and Photogrammetry Instructions.

The T-sheets and accompanying records have been examined by me and are considered complete and adequate for charting purposes and are approved.

Charles K. Townsend
CDR. NOAA

REVIEW REPORT TP-00610
Shoreline Survey
August 1976

61. General Statement

The final review of job maps consisted of: (1) an edit, including a general check of the field edit data and its application; (2) the completion and assembly of the Descriptive Reports and related records.

A careful comparison was made during compilation with published charts, enlarged where applicable to the manuscript scale, and with USGS quadrangles. Significant discrepancies were called to the attention of the field editor. For this reason no comparison was made during this review with other sources.

The hydrographic survey boat sheets are in the PMC. Class I manuscript copies were recently forwarded for use in smooth sheet processing. Much of the lettering and rock awash symbols had been shown smaller than the minimum size required for obtaining a good, reproduced copy. During this final review it was necessary to edit extensively. Copies of the final maps will be forwarded to the PMC.

The field editor stated that much difficulty in identification was encountered due to the poor quality of the photography. The location of rocks in the field was in excess of what was needed to depict the foreshore area at this scale. The compiler had difficulty with correctly identifying and placing on the manuscript some of the foreshore rock information. Foul limit lines were shown around such areas.

The compiler has shown a rock awash in Silver Canyon Landing. No rock is shown in this area on the published chart. Since the field editor did not comment on this object, its existence is uncertain. This will be called to the attention of Marine Charts on the Chart Maintenance Print.

62. Comparison with Registered Topographic Surveys

See item 61.

63. Comparison with Maps of Other Agencies

See item 61.

64. Comparison with Contemporary Hydrographic Survey

See item 61.

65. Comparison with Nautical Charts

See item 61.

66. Adequacy of Results and Future Surveys

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

Submitted by:

J. B. Phillips

Approved and Forwarded:

for A. K. Heywood

Chief, Photogrammetric Branch

Chief, Coastal Mapping Division

(37)

June 11, 1974

GEOGRAPHIC NAMES

FINAL NAME SHEETS

PH-7112 (Santa Catalina Island, Calif.)

TP-00610

Binnacle Rock
*Catalina Island East End Light
China Point
Church Rock
East Mountain
East Peak ← Jewfish Point
Outer Santa Barbara Passage
Palisades
Renton Mine
Salta Verde Point
San Pedro Channel
Santa Catalina Island
Seal Rocks
Silver Canyon
Silver Canyon Landing

*An identifiable feature, not a geographic name.

Prepared by:

C.E. Harrington

C.E. Harrington
Staff Geographer

[redacted]

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

RKSxFOR CHARTS

LOCALITY	DATE
Rockville	Aug. 76

to determine their value as landmarks.

ORIGINATING ACTIVITY
- [ ] HYDROGRAPHIC PARTY
- [ ] GEODETIC PARTY
- [ ] PHOTO FIELD PARTY
- [ ] COMPILATION ACTIVITY
- [ ] FINAL REVIEWER
- [x] QUALITY CONTROL & REVIEW GRP.
- [ ] COAST PILOT BRANCH

(See reverse for responsible personnel)

M

N.A. 1927

POSITION				METHOD AND DATE OF LOCATION (See instructions on reverse side)		CHARTS AFFECTED
LATITUDE		LONGITUDE				
′	″ D.M.Meters	° ′	″ D.P.Meters	OFFICE	FIELD	
18	7.01 216.0	118 18	59.91 1550.0	24 March 1972 72L2727	V - VIS March 1975	5112 5142 5142-SC

38

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

DESCRIPTIVE REPORT CONTROL RECORD

112 SCALE OF MAP 1:20,000 SCALE FACTOR None

OF TION (X)	DATUM	LATITUDE OR Y COORDINATE LONGITUDE OR X COORDINATE	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS (1 Ft. = 3048006 meter) FORWARD	(BACK)
182	N.A.	33°17'49.653"	1529.7	(318.7)
1045	1927	118°19'35.675"	923.0	(629.4)
182	N.A.	33°18'19.08"	587.8	(1260.6)
1044	1927	118°20'32.42"	838.7	(713.5)
182	N.A.	33°19'12.183"	375.3	(1473.2)
038	1927	118°24'46.570"	1204.6	(347.3)
82	N.A.	33°19'24.595"	757.7	(1090.8)
019	1927	118°27'23.056"	596.3	(955.6)
82	N.A.	33°19'36.454"	1123.1	(725.4)
028	1927	118°21'39.685"	1026.4	(525.4)
82	N.A.	33°18'41.261"	1271.1	(577.3)
015	1927	118°19'58.678"	1517.9	(34.2)
4		CHECKED BY F. R. Gustafson	DATE 1/11/74	

(3-25-63)

NAUTICAL CHART DIVISION

RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. TP-00610

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.

CHART	DATE	CARTOGRAPHER	REMARKS
18757	8-13-81	D. C. Larson	Full ~~Part Before~~ After Verification Review Inspection Signed Via
	8-17-81-RCL		Drawing No. 16
18746	8-14-81	D. C. Larson	Full ~~Part Before~~ After Verification Review Inspection Signed Via
	8-17-81-RCL		Drawing No. 36
18740	8-14-81	D. C. Larson	Full ~~Part Before~~ After Verification Review Inspection Signed Via
	8-17-81 RCL		Drawing No. 47 No corr
			Full Part Before After Verification Review Inspection Signed Via
			Drawing No.
			Full Part Before After Verification Review Inspection Signed Via
			Drawing No.
			Full Part Before After Verification Review Inspection Signed Via
			Drawing No.
			Full Part Before After Verification Review Inspection Signed Via
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