

# 8135

Diag. Cht. No. 5101-3.

Form 504

U. S. COAST AND GEODETIC SURVEY  
DEPARTMENT OF COMMERCE

## DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. WCFP-1553 Office No. H-8135

### LOCALITY

State California

General locality San Diego

Locality South San Diego Bay

194 54

### CHIEF OF PARTY

C. A. George

### LIBRARY & ARCHIVES

DATE January 31, 1956

B-1870-1 (1)

# 8135

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

REGISTER No. H-8135

Field No. WCFP-1553

State California  
General locality San Diego  
Locality South San Diego Bay  
Scale 1/10,000 Date of survey 18 March to 22 April 1954  
Instructions dated 12 October 1953  
Vessel West Coast Field Party  
Chief of party C. A. George  
Surveyed by K. A. MacDonald & H. L. Runge  
Soundings taken by ~~fathometer~~ graphic recorder, hand lead, wire pole  
Fathograms scaled by A. W. Brain  
Fathograms checked by A. W. Brain & H. D. Lantzy  
Protracted by C. E. Pedersen  
Soundings penciled by C. E. Pedersen  
Soundings in ~~fathoms~~ feet at MLW/ MLLW *and are true depths.*

REMARKS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

248

NOTES FOR DESCRIPTIVE REPORT TO ACCOMPANY HYDROGRAPHIC SURVEY

REGISTRY NO. H-8135(1954) FIELD NO. WCFP-1553

SOUTH SAN DIEGO BAY - CALIFORNIA

PROJECT CS-366

SCALE 1:10,000

WEST COAST FIELD PARTY

C. A. GEORGE, CHIEF OF PARTY

SURVEYED BY: K. A. MACDONALD AND H. L. RUNGE

A. PROJECT

The work was done in accordance with INSTRUCTIONS, 22/MEK, dated 12 October 1953. ✓

B. SURVEY LIMITS AND DATES

The area covered by this survey includes that part of South San Diego Bay south of Latitude  $32^{\circ} 41.6'$ , omitting the dredged mooring area in the northeast part of the bay. ✓

Field work began on 18 March and ended on 22 April 1954. ✓

C. VESSEL AND EQUIPMENT

U. S. Navy Launch LCPL No. 7, obtained on loan from the Naval Amphibious Base at Coronado, California, was used for all hydrography. The launch operated from Pier 2, U. S. Naval Station, San Diego, California. The turning radius of the launch at sounding speed was approximately 10 meters. Skiff No. 475 was used for pole sounding in a relatively small area for the purpose of obtaining the low water line. Fathometers of the 808J type were used. Fathometer No. 154 SPX was used throughout except for 18 March, when No. 152 SPX was used and 26 March when No. S-108 was used. ✓

D. TIDE AND CURRENT STATIONS

A portable tide gage was maintained at Pier 12, U. S. Naval Destroyer Base, National City California. ✓

E. SMOOTH SHEET

The smooth sheet <sup>was</sup> ~~will be~~ drawn and plotted by the Seattle Processing Office.

## F. CONTROL STATIONS

The source of control was from previous triangulation, 1954 triangulation, Graphic Control Sheet WCFF-A-54, Photo Topographic Sheet 5372 (1934) and Chart Letters furnished by the Washington Office. (WCFF-A-54 applied to H-8135 and marked for destruction.)

Positions of hydrographic signals GAS and NOR were furnished by the Washington Office by Chart Letters 394(1951) and 744(1944), Southwestern District, as "Stack, northwest of four" and "Tank, elevated north", respectively.

There was some uncertainty as to the recovery of San Diego, International Magnesite Co., Galvanized Iron Tower Cable, 1916 (hydrographic signal GAL). Sextant cuts taken from the hydrographic launch and plotted on the boat sheet checked the plotted position. The signal was identified on the field photographs, and the Washington Office was requested to furnish a verification of the position from the photogrammetric plot (See Paragraph 11-2, Photo Field Inspection Report).

Hydrographic stations MAG, LEO, IRK, and HOG are plotted on the boat sheet but were not used for hydrography in South San Diego Bay. The stations were used for the reconnaissance survey made on the outside coast. The boat sheet positions were obtained by sextant fixes, but the stations were identified on the photographs and positions can be obtained from the photogrammetric plot.

## G. SHORELINE AND TOPOGRAPHY

Shoreline for the boat sheet was transferred from Air Photo Compilation Sheets, RS-499(T-5371) and RS-500(T-5372) on which the shoreline had been corrected from 1953 photographs. (1933-50-54) (1933-53-54)

The shoreline was relocated by photogrammetric methods in 1954 (See Photo Field Inspection Report).

## H. SOUNDINGS

Soundings were taken with 808J type fathometers calibrated at 800 fms/sec., and with sounding pole in some shoal areas. Leadline soundings were obtained at intervals to check the fathometer.

At the inshore ends of many of the sounding lines, the launch was run aground on the mud flats. Weight was shifted to the port side of the launch to make the fish mounted on the starboard side ride clear of the bottom. This caused erroneous soundings on the fathogram. Pole soundings were taken in these instances, and the fathometer soundings rejected.

# H. SOUNDINGS - CONTINUED

Considerable difficulty was experienced with the sounding equipment during the early part of the season, especially in obtaining consistent bar checks. For this reason, velocity corrections were applied on the basis of daily bar checks until "m" day. Thereafter, a mean value of bar checks was used.

## I. CONTROL OF HYDROGRAPHY

The survey is considered complete and adequate to supersede prior surveys for charting.

A satisfactory junction was made with 11th Naval District, Hydrographic Survey (Drawings NC 146(5)/N19/N1-18(1) and 18(2)) in the vicinity of the Naval Amphibious Base, Coronado, California. The Director's letter, 22-RS, dated 8 March 1954, authorized the omission of hydrography in the area covered by the naval surveys.

Depth curves of 3 <sup>24</sup>~~and~~ feet were drawn in various places on the ~~boat~~ <sup>smooth</sup> sheet to define bottom features.

## K. CROSSLINES

A total of approximately 12% crosslines were run. Crossings on the boat sheet were satisfactory.

## L. COMPARISON WITH PRIOR SURVEYS

Numerous changes due to dredging and natural development have occurred in many parts of the bay since the area was last surveyed. The results of the 1954 survey are in generally good agreement with prior survey H-5680 (1934) (1:10,000 scale) in the southern part of the bay. See  
Review  
p 5

## M. COMPARISON WITH CHARTS

With reference to the Preliminary Review for Project CS-366, dated 15 October 1953, the following is noted:

Item 5 - The sunken wreck charted in Latitude 32° 39' 07", Longitude 117° 07' 25", was found as described. A fix was obtained at each end of the wreck and at the wreck buoy "WR 30". ~~deleted from chart (L778, 1954).~~ See  
p 6  
Review

Item 6 - The submerged piles along the seaplane boundaries were searched for but no evidence of their existence was found.

The seaplane boundary  
markers exist as charted - see  
D.R. C.S.-366 (Topo revision)  
Copy filed as chart letter 923 1955  
Under Article 8: OFFSHORE FEATURES  
See also chart letter 157- 1956 4/7/56  
3/9/56

# M. COMPARISON WITH CHARTS - CONTINUED

Item 7 - The low water spot charted in Latitude 32° 40' 19" Longitude 117° 09' 21", was disproved. Closely spaced lines were run over the area and no shoal was found. *Not found on present survey* *no longer charted 5-4-56*

Item 8 - The shoaling reported east of Glorietta Bay Entrance Buoys 5 and 6 does not exist. However, a line between positions 40r and 44r run on the Glorietta Bay Entrance Range shows that the range does not take advantage of the best water in the channel.

Item 9 - The 10 foot basin charted in Latitude 32° 37.5' and Longitude 117° 06.0' was not found. Sufficient lines were run in the area to disprove its existence. *Deleted from chart*

Item 11 - The wreck charted in Latitude 32° 38.5', Longitude 117° 07.3' was not found in that position, however a similar wreck was found in Latitude 32° 38.59', Longitude 117° 07.25'. This wreck was located by sextant fixes, positions 11b and 12b, and 81u and 82u. *In pres. survey position on chart 5107, dated 8-5-57.*

Item 12 - Sufficient lines were run in the vicinity of Entry Channel to determine its controlling depth.

Chart 5107 has a caution note, Latitude 32° 37.8', Longitude 117° 07.5', which reads "Numerous Mooring Buoys and H-Beam Piling in this area". No evidence of the H-Beam piling was found in the area by the hydrographic party. The existence of these objects was discussed with personnel of the 11th Naval District Public Works Department. Although no actual record of the removal of the beams could be found, it was the consensus of the opinion of personnel familiar with the area that the beams were removed after the termination of World War II. According to the Public Works Department, the beams were used as mooring piles and projected well above high water. *Note erased from chart. H.F.S. concurs. sma*

## N. DANGERS AND SHOALS

Danger	Latitude	Longitude	Least Depth	Pos No.
✓ Steel Pile	32 39.49 ✓	117 07.13 ✓	awash at MLLW ✓	60g ✓ <i>charted</i>
✓ Wooden Pile	39.08 ✓	07.22 ✓	<del>awash at H.W.</del> (2) ✓	9b & 79u ✓
✓ Derelict Barge	36.56 ✓	07.28 ✓	awash at MLLW (3) ✓	65u & 66u <i>charted</i>
✓ Stranded Barge (derelict)	36.47 ✓	06.72 ✓	bare 7 ft at MLLW ✓	67u & 68u <i>charted</i>
✓ Stranded Barge (derelict)	36.72 ✓	06.66 ✓	bare 7 ft at MLLW ✓	69u & 70u <i>charted</i>
✓ Stranded Schooner	38.59 ✓	07.25 ✓	bare 15 ft at MLLW ✓	81u & 82u <i>charted</i>
✓ Wreck	39.12 ✓	07.45 ✓	bare 15 ft at MLLW ✓	11b & 12b <i>Removed 6/17/57</i>
✓ Stranded Hulk	32 39.17 ✓	117 08.78 ✓	bare 20 ft at MHW ✓	14v & 15v <i>charted</i>
* Derelict Barge	39.39 ✓	07.40 ✓	(3) <i>from topo sheet</i>	13a <i>pos. estimated on sndg. line</i>

## P. AIDS TO NAVIGATION

Fixed aids to navigation were reported in Chart letter WCFP-54-6, forwarded to the Washington Office on 27 October 1954. A copy of the Chart Letter is included in this report.

\* This barge not charted pending confirmation & review since it lies at low line it is not much of a menace to navigation *sma 5-4-56*  
*Four wrecks added after review 5-4-56*

1848.25 1563.4

P. AIDS TO NAVIGATION - CONTINUED

Floating aids to navigation are as follows:

Buoy	Date Located	Pos. No.	Depth(ft)	Latitude o ' m	Longitude o ' m
SAN DIEGO BAY					
Lighted Buoy 18	14 Apr '54	96 "t" day		32 41 16 <sup>9</sup> 16	117 09 13 <sup>20</sup> 17
Lighted Buoy 20	14 Apr '54	"t" day	24	41 10 <sup>27</sup> 33	09 1088 <sup>4</sup>
Channel Light Buoy 22	14 Apr '54	"t" day	18	41 33 <sup>5</sup> 5	09 210 <sup>05</sup>
Channel Light Buoy 24	14 Apr '54	"t" day	31	40 1548	08 84 <sup>33</sup> 5
Channel Light Buoy 26	19 Mar '54	1"b"day		40 89 <sup>66</sup> 908	07 1471
Channel Light Buoy 28	16 Apr '54	2"b"day	30	40 43	07 910 <sup>08</sup>
Channel Light Buoy 30	19 Mar '54	3"b"day	29	40 43	07 910
Channel Light Buoy 31	16 Apr '54	73"u"day	16	39 6237	07 540 <sup>5</sup>
S. San Diego Bay Wreck Light	19 Mar '54	6"b" day		39 22 <sup>38</sup> 7	07 630 <sup>4</sup>
WR30A	16 Apr '54	76"u"day	12	39 227	07 630
Buoy 31	19 Mar '54	13"b"day		38 1088	07 478 <sup>84</sup>
Emory Channel Entrance Buoy No. 2	16 Apr '54	83"u"day	17	37 590 <sup>87</sup>	07 424 <sup>2</sup>
GLORIETTA BAY					
Entrance Light Buoy 3	19 Mar '54	20"b"day		37 590	07 424
Buoy 4	6 Apr '54	62"m"day	9	37 590	07 424
GLORIETTA BAY					
Entrance Light Buoy 3	14 Apr '54	94"t"day	11	41 626 <sup>89</sup>	09 1032 <sup>28</sup>
Buoy 4	14 Apr '54	93"t"day	10	41 668 <sup>0</sup>	09 1118 <sup>08</sup>
Channel Buoy 5	14 Apr '54	92"t"day	10	40 1767 <sup>1</sup>	09 625 <sup>78</sup>
Channel Light Buoy 6	14 Apr '54	91"t"day	8	40 1750 <sup>35</sup>	09 806 <sup>2</sup>
Channel Buoy 8	14 Apr '54	90"t"day	10	40 1448 <sup>4</sup>	09 1048 <sup>50</sup>
Channel Buoy 10	14 Apr '54	89"t"day	6	40 1111	09 1378 <sup>0</sup>
Channel Buoy 9	14 Apr '54	88"t"day	9	32 40 1030	117 09 1372 <sup>65</sup>

Q. LANDMARKS FOR CHARTS

Reported in Chart Letter WCFF-54-5, a copy of which is included in this report.

## U. VELOCITY CORRECTIONS

Velocity corrections were determined from bar checks taken during the hydrographic operations. A copy of the abstract of velocity corrections to be applied to the soundings on this survey is included in this report.

## Z. APPLICABLE DATA

Applicable Data	Forwarded To	Date
<b>TIDAL DATA</b>		
Level Records and Report of Tide Station (National City)	The Director	11 Feb '54
Marigrams, No's 1,2 and 3 (National City)	The Director	11 Feb '54
Marigrams, No's 4 to 24 incl. (National C)	The Director	23 Apr '54
Hourly Weights, Tide Reducers	Seattle Proc. Office	4 Nov '54
<b>TRIANGULATION DATA</b>		
Hor. Directions Vols. 1 to 4 Incl.	The Director	26 Apr '54
Triangulation Sketch	The Director	26 Apr '54
List of Dir. Computations, G.P's and Descriptive Report	The Director	26 Apr '54
<b>TOPOGRAPHIC DATA</b>		
Graphic Control Sheet WGFP A-54, Descriptive Report, Des. of Topo Sta. and Title Sheet	Seattle Proc. Office	28 Oct '54
<b>HYDROGRAPHIC DATA</b>		
Navy Hydrographic Maps, Amphibious Base, Coronado	The Director	2 March '54
Eight Navy Hydrographic Maps, Vicinity of San Diego	The Director	27 Apr '54
Abstract of Bar Checks & Velocity Corr.	Seattle Proc. Office	4 Nov '54
<b>PHOTOGRAMMETRIC DATA</b>		
Field Photographs	The Director	30 Aug '54
San Diego Harbor Dept. Drawings of Shelter Is. and Comm. Basin	The Director	25 Aug '54
Photo Field Inspection Report, Sketch	The Director	3 Sept '54
Photo Control Sketch	Seattle Proc. Off.	4 Nov. 1954
	The Director	3 Sept. 1954



Submitted

*Kenneth A. MacDonald*

Kenneth A. MacDonald  
Ensign, USC&GS

*C. A. George -*

Approved and Forwarded

C. A. George  
CDR., USC&GS  
CinC, West Coast Field Party

TIDE NOTE

To Accompany Descriptive Report of  
Sheet H-8135 - Field No. WCFP-1553

An automatic recording portable tide gage located at National City at Latitude  $32^{\circ} 39.86'$  Longitude  $117^{\circ} 07.08'$  was used for obtaining tide reducers for survey H-8135. Mean Lower Low Water on the staff corresponds to a reading of 4.6 feet. (Re: Acting Director's letter 36-rcb dated 18 February 1954) ✓

No correction to the observed readings were applied for differences in time or height.

ABSTRACT OF VELOCITY CORRECTIONS  
FOR HYDROGRAPHIC SURVEY

Field No. WCFP-1553 (1954)

SHEET NO. H-8135

West Coast Field Party CS-366

Date & Day Letter	Depth ft.	Corr.	Fathometer	
18 March	0.0 to 19.5	- 0.4	152	
"a" day	20.0 to 22.0	- 0.2		
	22.5 to 30.0	0.0		Use entire
	30.5 to 35.0	- 0.2		day
19 March	0.0 to 6.0	+ 0.6	154	Use entire
"b" day	6.5 to 30.0	+ 0.4		day
23 March	0.0 to 24.0	- 0.2	154	Use entire
"c" day	24.5 to 35.0	0.0		day
24 March	0.0 to 12.0	- 0.2	154	Use entire
"d" day	12.5 to 36.0	0.0		day
25 March	0.0 to 32.0	0.0	154	Apply to Pos.
"e" day	0.0 to 9.5	- 0.2		No's 1 to 10
	10.0 to 23.5	- 0.4		Apply to Pos.
	24.0 to 36.0	- 0.6		No's 11 to 219
26 March	0.0 to 8.5	- 0.2	154	Apply to Pos.
"f" day	9.0 to 30.0	0.0		No's 1 to 7
	30.5 to 36.0	- 0.2		
	3.0 to 9.0	- 0.6	108	Apply to Pos.
	9.5 to 17.5	- 0.4		No's 8 to 118
	18.0 to 30.0	- 0.2		
30 March	0.0 to 13.5	- 0.4	154	
"g" day	14.0 to 23.0	- 0.2	(with 152 amplifier)	Use entire
	23.5 to 30.0	0.0		day
31 March	0.0 to 6.0	- 0.4	154	
"h" day	6.5 to 21.5	- 0.2		Use entire
	22.0 to 29.0	0.0		day
	29.5 to 36.0	+ 0.2		
2 April	0.0 to 10.5	- 0.2	154	Use entire
"j" day	11.0 to 25.0	0.0		day
	25.5 to 30.0	+ 0.2		

## ABSTRACT OF VELOCITY CORRECTIONS

## Continuation

Date & Day Letter	Depth ft.	Corr.	Fathometer	
3 April "k" day	0.0 to 30.0 ✓ 30.5 to 35.0 ✓	-0.2 ✓ 0.0 ✓	154	Use entire day ✓
4 April "l" day	0.0 to 6.0 ✓ 6.5 to 11.0 ✓ 11.5 to 16.5 ✓ 17.0 to 30.0 ✓	-0.6 ✓ -0.4 ✓ -0.2 ✓ 0.0 ✓	154 ✓	Use entire day ✓
5;6;7;8;9;13; 14;16;20 & 22 of April "m"n"p"q"r"s" "t"u"v" & "w" days	0.0 to 18.5 ✓ 19.0 to 24.0 ✓ 24.5 to 30.5 ✓ 31.0 to 35.0 ✓ 35.5 to 40.0 ✓ 40.5 to 45.0 ✓ 45.5 to 49.5 ✓	+0.2 ✓ +0.4 ✓ +0.6 ✓ +0.8 ✓ +1.0 ✓ +1.2 ✓ +1.4 ✓	154 ✓	Use entire period ✓



STATISTICS FOR HYDROGRAPHIC SURVEY

Field No. WCFP 1553 (1954)

West Coast Field Party CS-366

Vol. No.	Day Letter	Date	HL Sdgs.	No. Pos.	Stat. Miles	Sdg.
I		(Pier Soundings)				
II	a	18 March		3	0.4	Launch
II	b	19 March		48	5.8	
II	c	23 March		31	6.4	
II & III	d	24 March		96	18.5	
III & IV	e	25 March		219	24.2	
IV & V	f	26 March		118	22.0	
V	g	30 March		103	19.0	
VI	h	31 March		94	16.7	
VI & VII	j	2 April		119	17.0	
VII & VIII	k	3 April		136	17.2	
VIII & IX	l	4 April		128	19.0	
IX & X	m	5 April		132	18.4	
X & XI	n	6 April		142	25.5	
XI	p	7 April		139	20.4	
XII	q	8 April		134	24.4	
XIII	r	9 April		60	8.6	
XIII	s	13 April		55		
XIII & XIV	t	14 April		98	6.1	
XIV	u	16 April		97	6.9	
XIV & XV	v	20 April		93	10.7	
XV	w	22 April		25	2.8	Launch
TOTALS				2070	290.0	
XVI	a	31 March	38	24	0.6	Skiff
XVI	b	1 April	70	38	1.5	Skiff
GRAND TOTAL			108	2132	292.1	

Total area 8.8 square statute miles

LIST OF STATIONS ON H-8135(1954)

Field No. WQFP-1553

Name Used in Hydre Survey	Origin of Station
AMP	Graphic Control Sheet WQFP-A-54
BASIN	BASIN, 1933
BAY	BAY 2, 1942
BEACH	BEACH 1954
BEN	San Diego Hanson Lumber Co. Chimney, 1916
BOW	Graphic Control Sheet WQFP-A-54
BUSH	National City, W. J. Bush Citrus Products Co. Stack, 1954
GEN	National City Nelse Corp. Elevator Alongside Tank, 1954
COVE	COVE (USE), 1954
COR	Coronado California Water and Telephone Co. Tank, 1954
DIKE	DIKE, 1954
DUNE	DUNE 3, 1954
FIELD	FIELD (GLO), 1954
GAL	San Diego International Magnesite Co., Galvanized Tower Cable, 1916
GAS	Stack, Northwest of Four (Position furnished by Washington Office on Form 567) Ch. Ltr. 394(1951) SW. Dist.
LAD	Graphic Control Sheet WQFP-A-54
LOOK	Coronado USN Amphibious Base Lookout Tower, 1954
MIN	Graphic Control Sheet WQFP-A-54
	Graphic Control Sheet WQFP-A-54
	Graphic Control Sheet WQFP-A-54
NOR	Tank, Elevated, North (Position furnished by Washington Office on Form 567) Ch. Ltr. 744(1954) SW. Dist.
PARK	PARK, 1954

# LIST OF STATIONS

(contd)

Name Used in Hydro Survey	Origin of Station
PIT	Graphic Control Sheet WGFR-A-54
POLE	Center of Three Poles Near SOUTH PYLON 2, 1954
RAG	RAG, 1954
RAN	RAN, 1954
SALT	Chula Vista Salt Works, Motor Rm., 1933
SEED	COTTON SEED, 1933
STACK	San Diego Municipal Sewage Works, Stack 1954
STRAND	SILVERSTRAND, 1933
TAN	South of Four Black Tanks, A.T. & S. Fe Tie Plant (Photo Topographic Sheet Reg. No. 5372)
TEL	Graphic Control Sheet WGFR-A-54
TOW	CORONADO TOWER, 1887
VIC	Graphic Control Sheet WGFR-A-54
YAT	Graphic Control Sheet WGFR-A-54

TO BE DELETED. STRIKE OUT ONE

# NON-DELETING HYDROGRAPHIC LANDMARKS FOR CHARTS

DATE: 27 OCT 1954

I recommend that the following objects which have ~~(been)~~ been inspected from seaward to determine their value as landmarks be ~~(deleted from)~~ the charts indicated  
The positions given have been checked after listing by G. F. Haraden

Target Chart

G. F. Haraden

Chief of Party

STATE			POSITION												METHOD OF LOCATION AND SURVEY NO.		DATE OF LOCATION		HARBOR CHART		INSHORE CHART		OFFSHORE CHART		CHARTS AFFECTED	
CHARTING NAME	DESCRIPTION	SIGNAL NAME	LATITUDE *		LONGITUDE *		DATUM																			
			° ' "	D.M. METERS	° ' "	D.P. METERS																				
(1) LARGEST DOME	Large dome on top of <del>landmark</del>		32 01.4		127 24.0		1957																			
(2) STACK (HWAFFA)	Stack (HWAFFA) <del>landmark</del>	H-8135	32 01.4		127 24.0		1957																			
(3) STACK		H-8135	32 01.4		127 24.0		1957																			
(3) SKELTON TOWER			32 01.4		127 24.0		1957																			
(3) TOWER			32 01.4		127 24.0		1957																			
(3) SOUTH TOWER			32 01.4		127 24.0		1957																			
(4) LOOKOUT TOWER			32 01.4		127 24.0		1957																			
(5) CUPOLA	Cupola on large <del>landmark</del>		32 01.4		127 24.0		1957																			
(6) RADIO TOWER			32 01.4		127 24.0		1957																			
(6) RADIO TOWER			32 01.4		127 24.0		1957																			
(7) CUPOLA	Cupola on <del>landmark</del> <del>landmark</del>		32 01.4		127 24.0		1957																			
Same as L. 978 (1954)																										

Same as L. 978 (1954)

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *nonfloating* aids to navigation, if redetermined, shall be reported on this form. 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



DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

W.C.F.P. - 54-5

Page 2 of 2

TO BE DELETED

STRIKE OUT ONE

LANDMARKS FOR CHARTS

DATE, 27 OCTOBER 1954

I recommend that the following objects which have (have not) been inspected from seaward to determine their value as landmarks be charted on (deleted from) the charts indicated.

The positions given have been checked after listing by

Page 2 of 2

C. A. Gump

Chief of Party.

STATE	CHARTING NAME	DESCRIPTION	SIGNAL NAME	POSITION				METHOD OF LOCATION AND SURVEY NO.	DATE OF LOCATION	CHARTS AFFECTED		
				LATITUDE*		LONGITUDE*				HARBOR CHART	INSHORE CHART	OFFSHORE CHART
				°	'	°	'					
		(1) This mark is situated in the water and should be charted as a light (green or yellow). It is not a mark of the water and should not appear on the chart.										
		(2) This mark is situated in the water and should be charted as a light (green or yellow). It is not a mark of the water and should not appear on the chart.										
		(3) This mark is situated in the water and should be charted as a light (green or yellow). It is not a mark of the water and should not appear on the chart.										
		(4) This mark is situated in the water and should be charted as a light (green or yellow). It is not a mark of the water and should not appear on the chart.										
		(5) This mark is situated in the water and should be charted as a light (green or yellow). It is not a mark of the water and should not appear on the chart.										
		(6) This mark is situated in the water and should be charted as a light (green or yellow). It is not a mark of the water and should not appear on the chart.										
		(7) This mark is situated in the water and should be charted as a light (green or yellow). It is not a mark of the water and should not appear on the chart.										

Same as letter 978(1954)

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and nonfloating aids to navigation, if redetermined, shall be reported on this form. 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

TO BE CHARTED  
TO ~~XXXXXXXXXX~~ } STRIKE OUT ONE

**27 OCTOBER, 19 34**

The positions given have been checked after listing by

**CH. 10**

**THE NEW YORK PUBLIC LIBRARY**

**U.S. DEPARTMENT OF JUSTICE**

**Chief of Party.**

**STATE CALIFORNIA**

Same as L. 978 (1954)

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *nonfloating* aids to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts and not by individual field survey sheets. Information under each column heading should be given.

Form  
April, 1954

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

NO. 1234

TO BE CHARTED  
~~TO BE CHARTED~~ STRIKE OUT ONE

RECOMMENDED FOR LANDMARKS FOR CHARTS

SOUTH BEND, WASHINGTON

27 OCTOBER 1954

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

The positions given have been checked after listing by

O. E. [Name]

Project 03-365

C. A. [Name]

Chief of Party

STATE CALIFORNIA

CHARTING NAME	DESCRIPTION	SIGNAL NAME	LATITUDE *		LONGITUDE *		DATUM	METHOD OF LOCATION AND SURVEY NO.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
			° ' "	D. M. METERS	° ' "	D. P. METERS							
STACK	Remains of 3 short stacks in a group of 5 stacks. One short tower remains. (1954)	QAS	32 41	1392.2	117 08	528	1954	1954	1954	X			5105 5107
GABLE	Westerly gable of large brick warehouse. Identified on photo 9420. See photo 9418 for location report (1954) part 9 a.									X			5107
ELEVATOR	National City, Main Department Elevator alongside tank. H-8135	CON	32 39	1391.1	117 06	45.520	1954	1954	1954	X			5105 5107
LOOKOUT TOWER	Remains of 3 short stacks in a group of 5 stacks. One short tower remains. (1954)	CON	32 40	1391.1	117 09	45.520	1954	1954	1954	X			5105 5107
STACK	National City, V.J. Bush Oil Tank. (1954)	CON	32 39	1391.1	117 06	45.520	1954	1954	1954	X			5105 5107
STACK	San Diego, Municipal Sewage Works Stack. Concrete stack. H-8135	STACK	32 40	1391.1	117 07	45.520	1954	1954	1954	X			5105 5107
POLE	Remains of three poles near tank. (1954)	POLE	32 37	1391.1	117 07	45.520	1954	1954	1954	X			5107
ELEVATED TANK	Remains of three poles near tank. (1954)	CON	32 41	1391.1	117 10	45.520	1954	1954	1954	X			5105 5107
The above stations have been plotted back on the original survey sheet, or have been compared with the triangulation coordinates.													
* Not shown, but located by triangulation in 1954.													
* Tabulate seconds and meters													

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and nonfloating aids to navigation, if redetermined, shall be reported on this form. 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.

16

ABSTRACT OF VELOCITY CORRECTIONS  
FOR HYDROGRAPHIC SURVEY

Field No. WOPR-1553 (1954)

SHEET NO. H-8135

West Coast Field Party OB-366

Date & Day Letter	Depth ft.	Corr.	Fathometer	
18 March	0.0 to 19.5	- 0.4	152	
"a" day	20.0 to 22.0	- 0.2		
	22.5 to 30.0	0.0		Use entire day
	30.5 to 35.0	- 0.2		
19 March	0.0 to 6.0	+ 0.6	154	Use entire day
"b" day	6.5 to 30.0	+ 0.4		
23 March	0.0 to 24.0	- 0.2	154	Use entire day
"c" day	24.5 to 35.0	0.0		
24 March	0.0 to 12.0	- 0.2	154	Use entire day
"d" day	12.5 to 36.0	0.0		
25 March	0.0 to 32.0	0.0	154	Apply to Pos. No's 1 to 10
"e" day	0.0 to 9.5	- 0.2		
	10.0 to 23.5	- 0.4		Apply to Pos. No's 11 to 219
	24.0 to 36.0	- 0.6		
26 March	0.0 to 8.5	- 0.2	154	Apply to Pos. No's 1 to 7
"f" day	9.0 to 30.0	0.0		
	30.5 to 36.0	- 0.2		
	3.0 to 9.0	- 0.6	108	Apply to Pos. No's 8 to 118
	9.5 to 17.5	- 0.4		
	18.0 to 30.0	- 0.2		
30 March	0.0 to 13.5	- 0.4	154	
"g" day	14.0 to 23.0	- 0.2	(with 152 amplifier)	Use entire day
	23.5 to 30.0	0.0		
31 March	0.0 to 6.0	- 0.4	154	
"h" day	6.5 to 21.5	- 0.2		Use entire day
	22.0 to 29.0	0.0		
	29.5 to 36.0	+ 0.2		
2 April	0.0 to 10.5	- 0.2	154	Use entire day
"j" day	11.0 to 25.0	0.0		
	25.5 to 30.0	+ 0.2		

## ABSTRACT OF VELOCITY CORRECTIONS

## Continuation

Date & Day Letter	Depth ft.	Corr.	Fathometer	
3 April	0.0 to 30.0	-0.2	154	Use entire
"k" day	30.5 to 35.0	0.0		day
4 April	0.0 to 6.0	-0.6	154	
"l" day	6.5 to 11.0	-0.4		
	11.5 to 16.5	-0.2		Use entire
	17.0 to 30.0	0.0		day
5;6;7;8;9;13; 14;16;20 & 22 of April	0.0 to 18.5	+0.2	154	
	19.0 to 24.0	+0.4		
	24.5 to 30.5	+0.6		
"m" "n" "p" "q" "r" "s"	31.0 to 35.0	+0.8		Use entire
"t" "u" "v" & "w"	35.5 to 40.0	+1.0		period
days	40.5 to 45.0	+1.2		
	45.5 to 49.5	+1.4		

APPROVAL SHEET

SURVEY H-8135 (FIELD NO. WCFP-1553)

The survey is considered complete and adequate. No additional field work is recommended.

The boat sheet was examined daily as the field work progressed.

The field records and boat sheet are to be forwarded to the Seattle Processing Office for smooth plotting in accordance with the Director's letter, 22/MEK, dated 11 October 1954.

All corrections to the soundings have been entered and checked. The soundings have been reduced, but not checked.

*C. A. George*

C. A. George  
CDR., USC&GS  
OinC, West Coast  
Field Party

## E. SMOOTH SHEET

The smooth sheet was hand constructed in the Seattle Processing Office by standard methods.

The air photo compilation films were distorted, necessitating the transfer of the shoreline by machine projector.

## F. CONTROL

Triangulation is from 1954 work. Graphic control from sheet WCFP-A-54. A difference was encountered with station Yat. Cuts to station Yat (Volumes 13 and 14) fell approximately 7 meters to the SW of the location picked from the control sheet. A check by replotting on the new location tended to prove the new location firm. ~~(Eleven fixes were affected by a change of 3 to 10 meters, the remaining fix changes being negligible.)~~ *sounding records do not indicate that any positions were revised due to the above conditions and none were revised during verification, the position changes being too slight*

## G. SHORELINE AND TOPOGRAPHY

Shoreline is from air photo compilation RS-499, a copy of T-5371 on which shoreline details have been corrected from 1950 photos, RS-500, a copy of T-5372 on which shoreline details have been corrected from 1953 work.

The finger piers and soundings at the yacht basin Glorietta Bay are shown by insert on the smooth sheet at a scale of 1:1,000.

## H. SOUNDINGS

At the ends of many of the lines where the launch grounded and a fathometer and a pole comparison were recorded; the pole sounding was penciled on the smooth sheet and indicated as a V. C. (vertical cast.) If mention was made in the notes of Mud bottom, this was penciled on the sheet as a bottom sample.

## K. CROSSLINES

Crosslines are in good agreement on the sheet throughout, with the exception of trouble encountered on part of K day (blue) on the 3rd of April, fathometer 808 J-154 SPX. From position 115 to 135 K crossings plot one foot too deep. Initial and fathogram speed as well as other factors were checked and no discrepancies were found. One half foot less depth on the part of K day would make crossings over the other days. Inasmuch as there is no apparent justification for changing the soundings, they are plotted as recorded. *discrepancies solved by scanning and/or eliminating soundings.*

## N. DANGER AND SHOALS

In addition to the dangers and shoals listed in the Descriptive Report, the "Derelict barge" noted on position 13a (green) was plotted

on the smooth sheet. This barge was not plotted on the boat sheet or mentioned in the Descriptive Report. The note will be found in volume 16, page 5. (This derelict barge is shown on RS-500 (T-5372).)

P. AIDS TO NAVIGATION

Geographic positions or proper control was not available, so ranges 1, 2, 3, and 4, Glorietta Bay, were pricked through from RS-500 (F-5372) and angles or bearings from the Light List used. These ranges however, do not hold-up well and it was felt that the locations were not good for ranges 2, 3, and 4, and possibly is due to the distorted films. Ranges 2, 3, and 4 were removed and should be plotted from proper control.


*The smooth sheet source for ranges 2, 3 and 4 is Chart letter 766 (55)*

Respectfully submitted,




Clarence E. Pedersen  
Carto. Comp. Aid

Examined & Approved:



William M. Martin  
Cartographer-in-charge, SPO

Approved and forwarded:



L. S. Hubbard, Captain, C&GS  
Seattle District Officer



## GEOGRAPHIC NAMES

San Diego.

South San Diego.

Coronado.

Glorietta Bay.

Emory Channel.

South San Diego Bay.

Imperial Beach.

Otay River.

Otay Valley.

Fruitdale.

Chula Vista.

Sweetwater River.

Sweetwater Valley.

Paradise Creek.

Seventh St. Channel

National City.

Las Chollas Cr.

RHC

# TIDE NOTE FOR HYDROGRAPHIC SHEET

~~XXXXXXXXXXXXXXXXXXXX~~  
~~Division of Coastal Surveys~~

14 February 1956

Division of Charts: R. H. Carstens

Plane of reference approved in  
16 volumes of sounding records for

HYDROGRAPHIC SHEET


8135

Locality San Diego Bay, California

Chief of Party: C. A. George in 1954  
Plane of reference is mean lower low water, reading  
4.6 ft. on tide staff at National City  
20.2 ft. below B. M. 3 (1934)

Height of mean high water above plane of reference is 5.3 feet.

Condition of records satisfactory except as noted below:

  
Chief, ~~Division of~~ Tides and ~~Currents~~ Branch

# GEOGRAPHIC NAMES

Survey No. **H-8135**

Name on Survey	GEOGRAPHIC NAMES									
	Survey No. <b>H-8135</b>									
	On Chart No.	On previous survey No.	On U. S. quadrangle Maps	From local information	On local Maps	P. O. Guide or Map	Rand McNally Atlas	U. S. Light List		
A	B	C	D	E	F	G	H	K		
<u>California</u>		(title)						BGN	1	
<u>South San Diego Bay</u>									2	
<u>South San Diego</u>									3	
<u>Imperial Beach</u>									4	
<u>Otay Valley</u>								BGN	5	
<u>Otay River</u>									6	
<u>Fruitdale</u>									7	
<u>Emory Channel</u>									8	
<u>Chula Vista</u>									9	
<u>Sweetwater River</u>									10	
<u>Sweetwater Valley</u>									11	
<u>Paradise Creek</u>									12	
<u>National City</u>				(tide station)					13	
<u>Seventh Street Channel</u>									14	
<u>Los Chollas Creek</u>									15	
<u>San Diego</u>								BGN	16	
<u>Coronado</u>									17	
<u>Glorietta Bay</u>									18	
									19	
									20	
									21	
									22	
									23	
									24	
									25	
									26	
									27	
									28	

M 234

Names approved 2-6-56

**L. H. Beck**  
(All names on chart 5107)

# Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. ~~8135~~.....

## Records accompanying survey:

Boat sheets ~~..1..~~; sounding vols. ~~..16..~~; wire drag vols. ....;  
bomb vols. ....; graphic recorder rolls ~~10-Envelopes~~  
special reports, etc. ~~1-Smooth sheet, & 1-Descriptive report~~.....  
.....

The following statistics will be submitted with the cartographer's report on the sheet:

Number of positions on sheet	.....	2/32
Number of positions checked	.....	117
Number of positions revised	.....	5
Number of soundings revised (refers to depth only)	.....	47
Number of soundings erroneously spaced	.....	0
Number of signals erroneously plotted or transferred	.....	0
Topographic details	Time	..... 8
Junctions	Time	..... 0
Verification of soundings from graphic record	Time	..... 2
Verification by <i>J. C. Garhart</i>	Total time	..... 148 Date 10-28-57
Reviewed by <i>W. Jespersen</i>	Time	..... 88 Date 12-13-57

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-8135

FIELD NO. WCFP-1553

California, San Diego, South San Diego Bay

Surveyed: March-April, 1954

Scale 1:10,000

Project No. CS-366

Soundings:

808 Fathometer

Control:

Sextant fixes on shore  
signals

Chief of Party - C. A. George  
Surveyed by - K. A. MacDonald and H. L. Runge  
Protracted by - C. E. Pedersen  
Soundings plotted by - C. E. Pedersen  
Verified and inked by - J. E. Gearhart  
Reviewed by - I. M. Zeskind  
Inspected by - R. H. Carstens

Date: 12-13-57

1. Shoreline and Control

The shoreline originates with unreviewed air-photographic surveys RS-499 (1933-50-54), and RS-500 (1933-53-54).

2. The source of the control is given in the Descriptive Report.

Sounding Line Crossings

Depths at crossings are in good agreement.

3. Depth Curves and Bottom Configuration

The usual depth curves were adequately delineated. The 3-ft. and 24-ft curves were drawn to better delineate the bottom configuration.

The bottom in this portion of San Diego Bay is relatively smooth except for the sharp gradients leading from the flats into the natural and dredged channels. Narrow deeps are found in several

---

flat areas, possibly as a result of dredging operations. A portion of the Bay is used for a seaplane landing area.

4. Junctions with Contemporary Surveys

On the northeast the present survey extends to the anchorage area charted as a dredged area, and to the area covered by surveys of the U. S. Navy south of the Seventh Street Channel. Other limits are bounded by the shores of South San Diego Bay.

5. Comparison with Prior Surveys

H-565 (1856), 1-10,000    H-5269 (1923), 1-10,000  
H-1420(1878), 1-10,000    H-5680 (1934), 1-10,000

A comparison between the prior and present surveys reveals radical changes in shoreline and bottom configuration, principally in that portion of South San Diego Bay which lies approximately north of lat.  $32^{\circ}38.3'$ . Here the bottom whose depths formerly ranged from 0-8 ft., has been dredged to general depths of 10-12 ft., channels have been dug, land has been reclaimed, and piers have been constructed. That portion of the natural channel which lies on the east side of the Bay south of lat.  $32^{\circ}39.5'$ , in general, shows only minor changes in depth of 2-3 ft., except in several areas where changes in depths of as much as 8 ft. are noted. The depths here, are principally shoaler. The southern end of the natural channel has been extended in a southwesterly direction towards the shore by the dredging of a channel whose controlling depth is 8 ft. South of approximately lat.  $32^{\circ}38.3'$ , the bottom has not been dredged except for the extension of the natural channel mentioned above. Here only minor changes in depths of 1-2 ft., are noted. These changes in depth are caused principally by shoaling of the bottom.

The present survey is adequate to supersede the prior surveys within the common area.

6. Comparison with Chart 5105 (Latest print date 7-22-57)  
Chart 5107 (Latest print date 8-5-57)

A. Hydrography

The charted hydrography originates principally with the U. S. Navy surveys of 1946-54, the U. S. Corps of Engineers surveys of 1944-56, the prior surveys previously discussed which need no further consideration, and critical soundings from

the boat sheet of the present survey. Only minor differences of 1-3 ft. between the charted and present survey depths are noted, except in Glorietta Bay and the channel leading from it to the main ship channel. This area, which was dredged subsequent to the present survey, shows charted depths which are as much as 10 ft. deeper than present survey depths.

Attention is directed to the wreck which is located on the present survey in lat.  $32^{\circ}39.12'$ , long.  $117^{\circ}07.45'$ . This wreck was subsequently demolished and removed (chart letter 778, 1954), and has been deleted from chart 5107, dated 8-5-57.

The present survey is adequate to supersede all the charted information originating prior to the present survey.

B. Controlling Depths

As noted above, the channel leading from Glorietta Bay northeastward to the main ship channel was dredged subsequent to the present survey and is charted from BP. 54388 (1956).

The present survey depths in the dredged channel which parallels the finger piers in the Yacht Harbor, Glorietta Bay, are in harmony with the charted controlling depth of 8 ft. from the U. S. Navy survey of 1953 (BP. 51077).

The present survey depths in Emory Channel are in harmony with the charted controlling depth of 8 ft.

C. Aids to Navigation

The present survey aids to navigation are in substantial agreement with the charted positions and adequately mark the features intended, except as follows:

The aids to navigation in Glorietta Bay and in the area which lies between the southeast shore of Coronado and the U. S. Navy Amphibious Base have been charted in accordance with the H. O. N. to M. of 1956 and 1957 as shown on Aid Proof 32, dated August 3, 1956. As noted in paragraph 6 A and B above, the aforementioned areas were dredged subsequent to the present survey and new positions and numbers for buoys were established. The charted aids adequately mark the features intended.

7. Condition of Survey

- a. The sounding records and Descriptive Report are complete and comprehensive.
- b. The smooth plotting was accurately done..

8. Compliance with Project Instructions

The survey adequately complies with the Project Instructions.

9. Additional Field Work Recommended

This survey is considered basic and no additional field work is recommended.

Examined and approved:

*Max G. Ricketts*  
Max G. Ricketts

Chief, Nautical Chart Branch

*Karl B. Jeffers*  
Karl B. Jeffers

Chief, Hydrography Branch

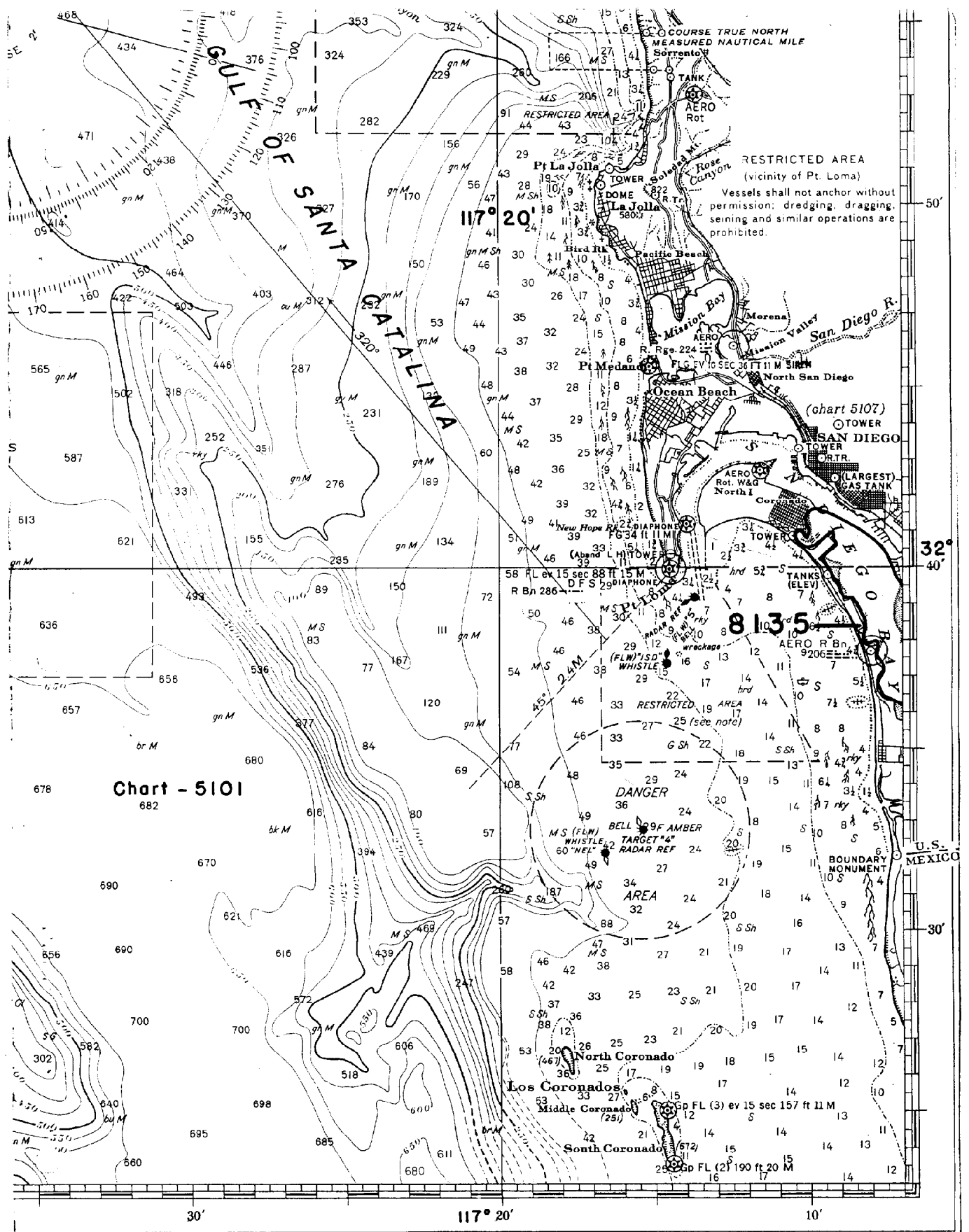
*Charles A. Schanck*

Charles A. Schanck  
Chief, Division of Charts

*Samuel B. Grenell*

Samuel B. Grenell  
Chief, Division of Coastal Surveys





## NAUTICAL CHARTS BRANCH

SURVEY NO. H-8135

### Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
2/29/56	5107	J. M. Gunn	Before <del>After</del> Verification and Review Examined only -
5-4-56	5105	J. M. Albert	Examined for dangers No correction made. Before <del>After</del> Verification and Review
2/12/59	5105	H.C. Anderson	Part Application <del>Before</del> After Verification and Review
5/4/59	5107	M. Rogers	Partially appld Considered as fully applied JMC <del>Before</del> After Verification and Review
7/26/79	K 773 5105	R.A. Lillis	Consider fully appld / per <del>Before</del> After Verification and Review Drg #42
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review

M-2168-1

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.