9107

Diag. Cht. No. 5101-3.

FORM C&GS-504

U.S. DEPARTMENT OF COMMERCE
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. DA-10-3-70 *Office No.* H-9107

LOCALITY

State California

General locality Southern Coast of California

Locality Vicinity of La Jolla

1970

CHIEF OF PARTY

R. E. Moses

LIBRARY & ARCHIVES

DATE 4-11-72

USCOMM-DC 37022-P66

9107

FORM C&GS-537 (5-66)

U.S. DEPARTMENT OF COMMERCE
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

REGISTER NO. H-9107

FIELD NO. DA-10-3-70

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

State California

General locality Coast of Southern California

Locality Vicinity of ~~San Diego~~ La Jolla

Scale 1: 10,000 Date of survey 16 March - 24 April, 1970

Instructions dated 15 December, 1969 Project No. OPR - 411

Vessel Ship Davidson, Launch DA-1, Launch DA-2

Chief of party CDR Ray E. Moses

Surveyed by CST A.A. Luceno, Ens. W.K. Taguchi, Ens. H.W. Herz

Soundings taken by echo sounder, hand lead, ~~pole~~ Raytheon DE-723, Nos. 214, 1276

Graphic record scaled by Ship's Personnel

Graphic record checked by Ship's Officers

Positions ~~Verified~~ by V.F. Flor Automated plot by PMC - Gerber - Digital Plotter

Soundings Verified by A.E. Eichelberger

Soundings in fathoms ~~feet~~ at ~~all depths~~ MLLW

REMARKS:

(2)

DESCRIPTIVE REPORT

To AccompanY

HYdrographic SurveY H-9107

DA-10-3-70

OPR-411

Southern California

Scale 1:10,000

USC&GSS DAVIDSON

1970

RaY E. Moses
CDR, USESSA
Commanding Officer
USC&GSS DAVIDSON

DESCRIPTIVE REPORT

DA-10-3-70

A. PROJECT

This survey was accomplished according to Project Instructions: OPR-411, Southern California, dated 15 December 1969.

B. AREA SURVEYED

The survey covered the inshore area off San Diego and La Jolla, California between the latitudes 32° 54' 15"N and 32° 47' 15"N.

Work was accomplished between 16 March and 24 April, 1970. The survey makes a junction with the following sheets:

DA-10-2-70	H-9106 (1970) Contemporary Survey
DA-40-1-70	H-9108 (1970) Contemporary Survey

C. SOUNDING VESSELS

The following vessels were used to obtain soundings on this survey:

Vessel	Position Number Color
Launch DA-1	Blue
Launch DA-2	Red

Bottom samples were taken by launch DA-1.

D. SOUNDING EQUIPMENT

Raytheon DE-723 fathometers were used:
also Lead Line

Launch DA-1	#214
Launch DA-2	#1276

Echo sounder corrections were determined from bar checks taken daily by the launches and Nansen casts made by the ship. The launch fathometers were initialed at zero, requiring draft corrections for their soundings. These corrections are included along with velocity corrections in the Modified Velocity Correction tape. All soundings are in fathoms. Differences between actual and assumed initial values are compensated for with an Initial Corrections (TC/TI) tape. From special tests and inspection of the fathograms it was determined that no phase correction need be applied.

E. SMOOTH SHEET

The smooth sheet will be constructed and plotted bY the Processing Division, Pacific Marine Center, Seattle, Washington.

F. CONTROL

Visual three-point fixes were used for control in this surveY. There were three tYpes of visual signals used: triangulation, photo and hYdrographic. The triangulation signals were plotted on the sheet bY ship's officers. Photo signals were plotted bY the ship's officers. HYdrographic signals were cut in with sextant angles. An abstract of signals is included in the appendix.

G. SHORELINE

The shoreline was traced from manuscripts and photographs of the area. The "zero fathom curve" was not sounded due to breakers close to shore.

H. CROSSLINES

The percentage of crosslines run was 6.5% (22.0 miles). There is good agreement at crossings.

I. JUNCTIONS

Junctions were made with the following sheets:

DA-10-2-70	H-9106	ContemporarY SurveY
DA-40-1-70	H-9108	ContemporarY SurveY

There is good agreement at the junctions.

J. COMPARISON WITH PRIOR SURVEYS

Comparison was made with the following surveYs:

H-5676	(10,000 - 1934)
H-4809	(10,000 - 1928)
H-5649	(10,000 - 1934)

There was good agreement with all of the above surveYs.

Several pre-surveY review items were investigated with the following results:

(1) Item 8: the fish haven in Lat. 32° 53.19'N, Long. 117° ~~16.02~~ 15.83'W as reported in the review was found not to exist. No shoal soundings were discovered in the area and the uniformity of the bottom in the area was not broken. not adequately developed nor were buoys located; should be retained on chart

(2) Item 9: the rocks reported in Lat. 32° 49.00'N, Long. 117° 16.60'W were found and detached positions were taken. These positions are shown on the boat sheet as positions 2082 and 2083. The rock at DP #2082 was awash at 1536. The rock at DP #2083 was slightly submerged at 1539. ← plotted as ⊀(1) These positions can be found in Volume 16 of the sounding volumes for H-9107. The Pre Survey Review item #9, present position of rock on H-9107 should be used for charting.

(3) The circled area in Lat. 32° 50.4'N, Long. 117° 18.1'W was developed and shoal soundings of ~~9.8~~ 9.2 fathoms were found. (@ 32° 50.16' 117° 17.77' 9 fathoms)

(4) The area circled (1 ¾ fm) in Lat. 32° 52.~~3~~ 38'N, Long. 117° 15.25' 7 W was ~~in the surf and not~~ not investigated adequately. sdg discredited and not retained

K. COMPARISON WITH THE CHART

Comparison of soundings and depth curves with C&GS chart 5060, 3rd Ed., 13 January 1969, was good. Selected soundings compared well with those on the boat sheet.

L. ADEQUACY OF SURVEY

This survey is considered complete and adequate to supersede prior surveys.

M. AIDS TO NAVIGATION

There are two Navy ranges in the area that constitute a measured nautical mile. Both are visible from seaward. Their location was checked by ground inspection.

N. STATISTICS

Vessel	No. of Positions	Sounding Lines (NM)	Bottom Samples	Detached Positions
Launch DA-1 m	2116	249.9	33	3
Launch DA-2	755	89.7	0	0

The total area surveyed is 12.06 square nautical miles. There are 17 volumes for this survey. Bottom samples are in volume 17. DP's are included in the regular sounding volumes. All soundings on the boat sheet have been reduced by the predicted tides for Point Loma. No development overlays were made for the sheet. There are four position-sounding tapes for DA-1 and one for DA-2. There are two TC/TI tapes and one velocity tape (Table 3 is for DA-1, Table 4 is for DA-2).

O. MISCELLANEOUS

An HUL logger with BCD code was used to log this survey. A sample of the format is included in the appendix.

P. RECOMMENDATIONS

There are no recommendations for this sheet.

Q. REFERENCES TO REPORTS

Corrections to Echo Sounders Report, OPR-411, DAVIDSON, 1970 (transmitted to CFS3 #DA-82-70).

Geographic Names Report, OPR-411, DAVIDSON, 1970 (transmitted to CFS3 #DA-67-70).

Field Edit Report, Chart Topography, Mexico to Dana Point, Feb., 1970, Project PH-6702, submitted by R.B. Melby.

Field Edit Report, OPR-411, DAVIDSON, 1970 (transmitted to CFS3 #DA-60-70).

Landmarks Report, OPR-411, DAVIDSON, 1970 (transmitted to CFS3 #DA-67-70).

Respectfully submitted,

Howard W. Herz

Howard W. Herz
ENS, USESSA

APPENDIX

APPROVAL SHEET

OPR-411

DA-10-3-70

Southern California

The field work on this surveY was accomplished under mY supervision. Frequent inspections were made of the boat sheet and other records.

John D. Boudra for

RaY E. Moses
CDR, USESSA
Commanding Officer
USC&GSS DAVIDSON

LIST OF STATIONS ON DA-10-3-70

Signal Number	Origin of Signal
301	T-11877
302	"
303	"
304	"
305	"
306	"
307	"
308	"
309	"
310	"
311	"
312	"
313	T-11876
314	"
315	"
316	"
317	"
318	"
319	"
320	"
321	"
322	"
323	"
324	"
325	"
326	"
327	"
328	"
329	"
330	"
331	"
332	T-11875
333	"
334	" T-11875
335	~~Vol. X, pp. 4-6, 48-50~~
336	~~T-11875~~ Vol. X, pp. 4-6, 48-50
337	Vol. X, pp. 4-6, 48-50
338	SOUTHWEST RANGE USN, 1933
339	STANDPIPE, 1962
340	Vol. X, pp. 4-6, 48-50
341	NORTHWEST RANGE USN, 1933
342	Vol. X, pp. 4-6, 48-50
343	T-11876
344	Vol. X, PP 4-6, 48-50

SIGNAL PLOTTER CARDS

H-NO.			LATITUDE	LONGITUDE	X	Y	X	
09107	301	68	32464331	117150834	02003	00043		301
09107	302	68	32470451	117151080	02071	00729		302
09107	303	68	32470928	117151253	02119	00883		303
09107	304	68	32471805	117151433	02168	01167		304
09107	305	68	32472701	117151384	02154	01457		305
09107	306	68	32473266	117151760	02257	01639		306
09107	307	68	32474402	117153163	02641	02007		307
09107	308	68	32475671	117152606	02489	02417		308
09107	309	68	32481497	117153771	02807	03008		309
09107	310	68	32482123	117154213	02928	03210		310
09107	311	68	32482840	117155670	03326	03442		311
09107	312	68	32482896	117160035	03425	03460		312
09107	313	68	32485610	117162164	04007	04337		313
09107	314	68	32490873	117162860	04197	04746		314
09107	315	68	32491759	117164444	04630	05032		315
09107	316	68	32493642	117164279	04585	05641		316
09107	317	68	32494717	117164633	04681	05989		317
09107	318	68	32495739	117165064	04799	06319		318
09107	319	68	32500766	117164891	04752	06651		319
09107	320	68	32502246	117165079	04803	07130		320
09107	321	68	32503834	117163892	04479	07644		321
09107	322	68	32505028	117164042	04520	08030		322
09107	323	68	32505246	117163265	04308	08100		323
09107	324	68	32510211	117162250	04031	08412		324
09107	325	68	32505648	117154834	03098	08231		325
09107	326	68	32510140	117154484	03003	08390		326
09107	327	68	32511591	117153027	02605	08860		327
09107	328	68	32512801	117152142	02364	09251		328
09107	329	68	32514389	117151442	02173	09764		329
09107	330	68	32520133	117152292	02405	10329		330
09107	331	68	32521578	117150742	01982	10796		331
09107	332	68	32521983	117150442	01900	10927		332
09107	333	68	32523873	117150085	01803	11538		333
09107	334	68	32525155	117145797	01724	11953		334
09107	335	68	32525480	117145832	01734	12058		335
09107	336	68	32532227	117150335	01871	12946		336
09107	337	68	32533977	117150823	02005	13512		337
09107	338	68	32533460	117145667	01689	13345		338
09107	339	68	32533532	117142616	00857	13368		339
09107	340	68	32542350	117151578	02211	14927		340
09107	341	68	32543477	117150727	01979	15291		341
09107	342	68	32545032	117152694	02516	15794		342
09107	343	68	32501136	117161369	03790	06771		343
09107	344	68	32535992	117150923	02032	14164		344

000000

H-9107

GEOGRAPHIC NAMES

BIRD ROCK

CASA COVE

CRYSTAL PIER

FALSE PT

GOLDFISH PT

LA JOLLA BAY

LA JOLLA CANYON

LA JOLLA CAVES

PACIFIC OCEAN

PT LA JOLLA

ROCKY PT

SEAL ROCK

WINDANDSEA BEACH

(12)

LIST OF MANUSCRIPTS

T-11875

T-11876

T-11877

RS-854

RS-855

RS-853

ABSTRACT OF POSITIONS

(Volume no. in parentheses)

Day	Launch 1	Launch 2	Detached Positions	Bottom Samples
76	001-122 (1)			
78	123-378 (1,2)			
79	379-515 (3)			
82	516-667 (4)			
83	668-767 (4)			
84	768-1001 (5)			
85	1002-1159 (6)			
86	1160-1272 (7)			
90	1273-1398 (7,8)			
96	1552-1668 (9)		3*	
98	1669-1745 (9)	3043-3158 (10)		
99	1746-1922 (12)	3159-3334 (11)		
100		3335-3426 (9,13)		
108		3427-3548 (13)		
109		3548-3638 (14)		
110	8000-8032 (17)	3639-3783 (14,15)		33*
114	1923-2083 (16)			

* Launch 1

"INITIAL" CORRECTIONS DA-1 DA-10-3-70

DAY	TIME	CORRECTION
076	092600	0.0 fm.
	131000	-0.2
	151000	0.0
078	084200	0.0
	110600	-0.1
	114900	0.0
	134600	-0.1
	135500	0.0
079	093200	0.0
	140300	-0.1
	140500	0.0
082	085800	0.0
	091800	-0.2
	094700	0.0
083	102600	0.0
	103300	-0.1
	103600	0.0
	111300	-0.1
	111600	0.0
	122800	-0.1
	124200	0.0
	124400	-0.1
	124700	0.0
	125600	-0.1
	130800	0.0
	132200	-0.1
084	091100	0.0
	123800	-0.2
	132000	0.0
085	102100	0.0
	105000	-0.1
	110300	0.0
086	092200	0.0
090	091600	0.0
	141800	-0.1
	141900	0.0

"Initial" Corrections, DA-1
DA-10-3-70

DAY	TIME	CORRECTION
091	092200	0.0 fm.
	105400	-0.1
	105800	0.0
	145500	0.0
096	092400	0.0
	144600	0.0
098	102500	0.0
099	092400	0.0
	145300	-0.1
	154500	-0.1
110	082000	0.0
114	085600	0.0
	102400	-0.1
	102900	0.0
	151300	0.0

"INITIAL" CORRECTIONS DA-2 DA-10-3-70

DAY	TIME	CORRECTION
098	092500	0.0 fm.
099	093800	-0.1
	095400	0.0
	103900	+0.2
	104445	0.0
	132645	-0.1
	133630	0.0
100	121300	0.0
108	102200	0.0
	103915	-0.1
	104400	0.0
	114100	-0.1
	143800	-0.1
109	085300	0.0
	085800	-0.1
	094900	0.0
	100600	-0.2
	110000	-0.1
110	093000	0.0

72. 03118

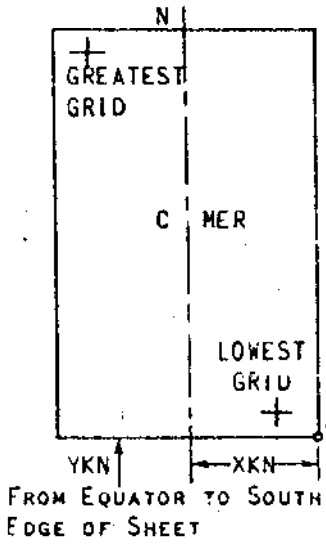
(17)

FORM # 1 FIG. 15

PARAMETERS FOR DIGITAL COMPUTING
POLYCONIC PROJECTION

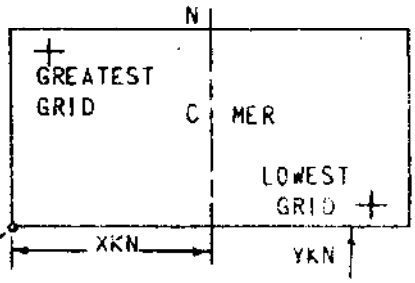
(1) PROJECT No. CSP-411 (4) REQUESTED BY William Jeffers
(2) H No. 9107 (5) SHIP OR OFFICE DAVIDSON
(3) FIELD No. DA - 10-3-70 (6) DATE REQUIRED 1-15-68
(7) VISUAL ☑ (8) ELECTRONIC ☐ (FILL OUT FORM #3)
(10) XKN (SP 5) DISTANCE FROM CMER TO EAST EDGE (NYX = 1) OR WEST EDGE (NYX = 0). 481944 METERS
(11) YKN (SP 241) DISTANCE FROM EQUATOR TO SOUTH EDGE OF SHEET. 3,627,974.21 METERS
(12) CENTRAL MERIDIAN 117° 17' 00"
(13) SURVEY SCALE 1: 10,000
(14) SIZE OF SHEET (CHECK ONE) 36x54 ☐ 42x60 ☐ OTHER 36x61 ☑
(15) NYX, ORIENTATION OF SHEET (CHECK ONE)

NYX = 1 ☑



FROM EQUATOR TO SOUTH EDGE OF SHEET

NYX = 0 ☐



FROM EQUATOR TO SOUTH EDGE OF SHEET

(9) PLOTTER ORIGIN (CORNER OF SHEET)

LATITUDE 32° 46' 42"
LONGITUDE 117° 13' 55"

GRID LIMITS

(16) GREATEST LATITUDE 32° 54' 30" (PROJECTION LINE
(17) LOWEST LATITUDE 32° 47' 00" INTERVAL, PAGE 4
(18) DIFFERENCE 0° 7' 30" HYDRO MANUAL)
(19) 0° 30"
(20) 15 YSN

(21) GREATEST LONGITUDE 117° 19' 30"
(22) LOWEST LONGITUDE 117° 14' 00"
(23) DIFFERENCE 0° 5' 30"
(24) 0° 30"
(25) 11 XSN

LIST G.P. OF ALL STATIONS TO BE PLOTTED ON THIS PROJECTION ON THE BACK OF THIS FORM. (DEG., MIN., METERS)

DV

H 9107

Field No. 64 03118

Date 4/9/68

~~HYDRO II AND III PARAMETER CARDS~~

PARAMETER CARD II

			RDA	XKN	YKN	CMR	SCA	NYX	FOF	JN	YR
Semi major axis of the earth	6,378,206.4		6								
X Constant- Distance from central meridian to origin of plotter SP 5	4814.44 meters			4							
Y Constant - Distance from equator to origin of plotter SP 241	3628,066.62 meters				3						
Central Meridian of Projection	117 17 00					4					
Plotter Scale/Survey Scale	*10498.6876 1:10,000						1				
North/south axis of sheet - to correspond to (Y axis - 0) (X axis - 1) of plotter								1			
Feet/Fathom indicator	0 - feet 1 - fathom								1		
H Identification No.										031	
											20

FOF - 1

PARAMETER CARD III

		YST	XST	DXY	XSN	YSN
Lowest Lat. Intersection	32 47 00	1				
Lowest Long. Intersection	117 14 00		4			
Difference between Grid	30			3		
Interval (Long)					1	
Interval (Lat)						1

Computed DJL

Punched

Checkdd

Date

U.S. DEPARTMENT OF COMMERCE
Environmental Science Services Administration
COAST AND GEODETIC SURVEY
Rockville, Md. 20852

(19)

Date: June 24, 1970

Reply to Attn of: C331W-172-CSS

Subject: Tidal Data, California Coast

To: Commanding Officer
USC&GSS DAVIDSON

In reference to your memorandum of May 21, 1970, there are enclosed hourly heights for La Jolla, California. La Jolla has been substituted due to the poor tide record at San Diego. Datum is 4.1 feet below mean lower low water.

Listed below are the Hydrographic Sheets and the corrections to apply to the La Jolla hourly heights.

Sheet No.	Time Correction	Range Ratio
9108	0	1.0
9107	0	1.0
9106 (outside)	0	1.0
" (inside)	+0 10	1.1
9105 (outside)	0	1.0
" (inside)	0	1.1

L C Wharton

L. C. Wharton
Tides & Currents Branch
Oceanography Division

Enclosures

FWD

TIDE NOTE (FIELD)
OPR-411
H-9107

Standard Station	Scripps' Pier, La Jolla, Calif.
Latitude	32° 52.0' N
Longitude	117° 15.4' W
Datum	4.1 ft. below MLLW
Time Mer.	120° W
Time Corr'n	0
Range Ratio	1.0

(31)

APPROVAL SHEET

The smooth sheet has been inspected, is complete, and meets the requirements of the General Instructions for automated surveys and the Hydrographic Manual. (Note: All exceptions are listed in the Verifier's Report.)

Examined and approved,

William M. Martin
Supervisory Carto. Tech.
3/30/72

Approved and Forwarded,

Walter L. Bradly, CDR, NOAA
Chief, Processing Division
Pacific Marine Center

FORM C&GS-712
(3-9-64)

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

(12)

TIDE NOTE FOR HYDROGRAPHIC SHEET

November 10, 1970

~~Nautical Chart Division~~: Pacific Marine Center

Plane of reference approved ~~in~~
~~volume~~ ~~records~~ for

HYDROGRAPHIC SHEET H9107 and H9108

Locality: Southern California

~~Chief Tidal Party~~: Year: 1970

Plane of reference is mean lower low water

Tide Station Used (Form C&GS-681):

La Jolla, California

Height of Mean High Water above Plane of Reference is as follows:

4.5 feet

Remarks

For L.C.L. Hatton

Chief, Tides and Currents Branch

USCOMM-DC 6650-P64

FORM 197
(3-16-55)

GEOGRAPHIC NAMES

Survey No. H-9107

Name on Survey	A On Chart No.	B On previous survey No.	C On U. S. quadrangle Maps	D From local information	E On local Maps	F P. O. Guide or Map	G Rand McNally Atlas	H U. S. Light List	K	
Bird Rock										1
Casa Cove										2
Crystal Pier										3
False Point										4
Goldfish Point										5
La Jolla										6
La Jolla Bay										7
Pacific Ocean										8
Point La Jolla										9
Rocky Point										10
Windandsea Beach										11
Whale View Point										12
Seal Rock										13
Lajolla Canyon										14
The Cove		Names Prepared: F. W. Pickett 8-1-72								15
										16
										17
		Names Approved A. J. Wright 8-1-72								18
										19
		Chas. E. Harrington 3-26-1974								20
										21
										22
										23
										24
										25
										26
										27

(24)

FORM C&GS-946
(REV. 11-65)
(PRESC. BY HYDROGRAPHIC MANUAL 20-2, 6-94, 7-13)

U.S. DEPARTMENT OF COMMERCE
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
COAST AND GEODETIC SURVEY
NAUTICAL CHART DIVISION

HYDROGRAPHIC SURVEY STATISTICS

HYDROGRAPHIC SURVEY NO. H-9207

RECORDS ACCOMPANYING SURVEY: To be completed when survey is registered.

RECORD DESCRIPTION	AMOUNT	RECORD DESCRIPTION	AMOUNT
SMOOTH SHEET & PNO	1	BOAT SHEETS	1
DESCRIPTIVE REPORT	1	OVERLAYS	3

DESCRIPTION	DEPTH RECORDS	HORIZ. CONT. RECORDS	PRINTOUTS	TAPE ROLLS	PUNCHED CARDS	ABSTRACTS/ SOURCE DOCUMENTS
ENVELOPES			5pgs.			
CAHIERS	1					
VOLUMES	17					
BOXES			1			

T-SHEET PRINTS *(List)*

SPECIAL REPORTS *(List)*

OFFICE PROCESSING ACTIVITIES

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

PROCESSING ACTIVITY	AMOUNTS			
	PRE-VERIFICATION	VERIFICATION	REVIEW	TOTALS
POSITIONS ON SHEET				2834
POSITIONS CHECKED		2834	20	
POSITIONS REVISED		137	3	
DEPTH SOUNDINGS REVISED		796	20	
DEPTH SOUNDINGS ERRONEOUSLY SPACED		0	0	
SIGNALS ERRONEOUSLY PLOTTED OR TRANSFERRED		0	0	
	TIME (MANHOURS)			
TOPOGRAPHIC DETAILS		12	30	
JUNCTIONS		4	30	
VERIFICATION OF SOUNDINGS FROM GRAPHIC RECORDS		14	32	
SPECIAL ADJUSTMENTS				
ALL OTHER WORK		469	85	
TOTALS		499	177	218

	BEGINNING DATE	ENDING DATE
PRE-VERIFICATION BY		
VERIFICATION BY V.F. Flor A.E. Eichelberger	3/30/71	3/28/72
REVIEW BY S. Baumgartner	Feb 18, 1974	April 9, 1974

D.K. Hughes - 37 hrs. 6/12/74 Insp. R.H. Carlson

USCOMM-DC 36271-P65

(25)

Reg. No. H-9107

The Computer and Excess Sounding Cards for this survey have not been corrected to reflect the changes made to the Computer Card and Excess Card Printouts at this time of the review.

When the cards have been updated to reflect the final results of the survey the following shall be completed:

CARDS CORRECTED —

DATE_____ TIME REQ'D_____ INITIALS_____

REMARKS:

H-9107

Information for Future Pre-Survey Reviews

The only significant change that has occurred since the prior survey is the shoaling in La Jolla Canyon. The bottom is considered adequately developed on the present survey. Lines inshore are lacking because of breakers and foul areas. The amount the rock awash uncovers in lat. 32°52.2', long. 117° 15.22 should be verified because of conflict in survey information.

Position Index Lat.	Long.	Bottom Change Index	Use Index	Resurvey Cycle
324	1172	3	4	25 Years
325	1172	3	2	50 Years

OFFICE OF MARINE SURVEYS AND MAPS

MARINE CHART DIVISION

HYDROGRAPHIC SURVEY REVIEW

REGISTRY NO. H-9107 FIELD NO. DA-10-3-70

California, Southern Coast of California; vicinity of La Jolla

SURVEYED: March 16 - April 24, 1970

SCALE: 1:10,000 PROJECT NO.: OPR-411

SOUNDINGS: DE-723 Depth Recorder
Leadline

CONTROL: Sextant Fixes on
Shore Signals

Chief of Party ..... R. E. Moses
Surveyed by ..... A. A. Luceno (Civilian)
..... W. K. Taguchi
..... H. W. Herz
Protracted by ..... Gerber Digital Plotter (PMC)
Verified by ..... V. F. Flor
..... A. E. Eichelberger
Reviewed by ..... S. Baumgardner
DATE: April 4, 1974
Inspected by ..... G. K. Myers

1. Description of the Area

This survey extends about 2 miles off the coast of Southern California from lat. 32°54.20' southernly to the vicinity of Mission Beach. Heavy seas and foul areas inshore generally prevent a close approach to the shore in this area.

La Jolla Canyon, located in the northern part of the survey is a deep submarine canyon with offshore maximum depths of 165 fathoms on this survey. Inshore the canyon's head branches to the northeast and the southeast and continues to within 435 meters of the coast.

In the area north of La Jolla Canyon the bottom is regular and slopes gradually seaward to the 30-fathom depth curve. Further offshore, a more abrupt deepening continues to the western limit of the survey.

South of the canyon, particularly off La Jolla, the bottom is irregular with many ledges, rocks awash, and foul areas inshore. In depths greater than 10 fathoms the bottom gradually slopes to depths in excess of 28 fathoms.

Kelp is abundant along the coast from False Cape to Point La Jolla.

2. Shoreline and Control

The source of control is adequately described in Part F of the Descriptive Report.

The shoreline originates with revision surveys RS 853 (T-11875), RS 854 (T-11876), and RS 855 (T-11877) based on 1966 photography and additional information retained from T-11876 (1960-62), T-5374, and T-5375 of 1933-34 shown in color. However, attention is directed to a new compilation series of shoreline manuscripts based on 1972 infrared photography for charting more recent information.

3. Hydrography

Depths at crossings are in good agreement. The usual depth curves were adequately delineated except in some areas within the 3-fathom depth curve. Here little hydrography was accomplished on the present survey because of breakers. The investigation of least depths and the delineation of bottom configuration are considered adequate.

4. Condition of the Survey

The sounding records, smooth plotting, various sounding printouts, and Descriptive Report are adequate and conform to the requirements of the Hydrographic Manual supplemented by the Instruction Manual-Automated Hydrographic Surveys.

5. Junctions

Adequate junctions were effected with H-9106 (1970) on the south and H-9108 (1970) on the west.

The junction with H-9248 (1971) on the north will be considered in the review of that survey.

6. Comparison with Prior Surveys

A.	H-1889 (1889), 1:20,000	H-4266 (1922), 1:40,000
	H-1905 (1889), 1:20,000	H-4810 (1928), 1:20,000

These early surveys have been compared with and superseded in part by the surveys discussed in the following paragraphs. In the areas not superseded, the sparcity of soundings and the small scale of these prior surveys precludes a detailed comparison with the present survey.

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

B. H-5649 (1934), 1:10,000
H-4809 (1928), 1:10,000
H-5676 (1934), 1:10,000

These early surveys cover about 80 per cent of the present survey. A detailed comparison between the prior and present soundings reveals variable differences of ½ to 1½ feet within 11-fm. depths.

The 1 fm. 4 ft. charted in lat. 32°52.38', long. 117°15.25' from H-5649 (1934) falls in depths of 2.8 to 5.8 fms. The sounding is discredited by present depths and should be disregarded. The descriptive report of H-5649 specifically makes reference to the conflict of this sounding with other soundings on a crossline.

Although the character of La Jolla Canyon has remained the same, significant shoaling has occurred in some of the deeper depths. Here, a comparison in the vicinity of lat. 32°52.37', long. 117°15.5' reveals a recession in the 50-fathom depth curve of about 350 meters offshore.

Inshore soundings from these earlier surveys and rocks from T-5374 and T-5375 of 1934 have been brought forward to supplement present survey depths. With the addition of these soundings and rocks, the present survey adequately supersedes the prior surveys in the common area.

7. Comparison with Chart 5060 (latest print date 12/29/73)

A. Hydrography

The charted hydrography originates with the previously described prior surveys which require no further consideration, supplemented by the boat sheet and the verified smooth sheet of the present survey.

Pre-Survey Review items charted in the area of the present survey are discussed in Para. J "Comparison with Prior Surveys" of the Descriptive Report.

The present survey is adequate to supersede the charted hydrography within the common area.

B. Aids to Navigation

There are no aids to navigation within the limits of this survey.

8. Compliance with Project Instructions

This survey adequately complies with the project instructions.

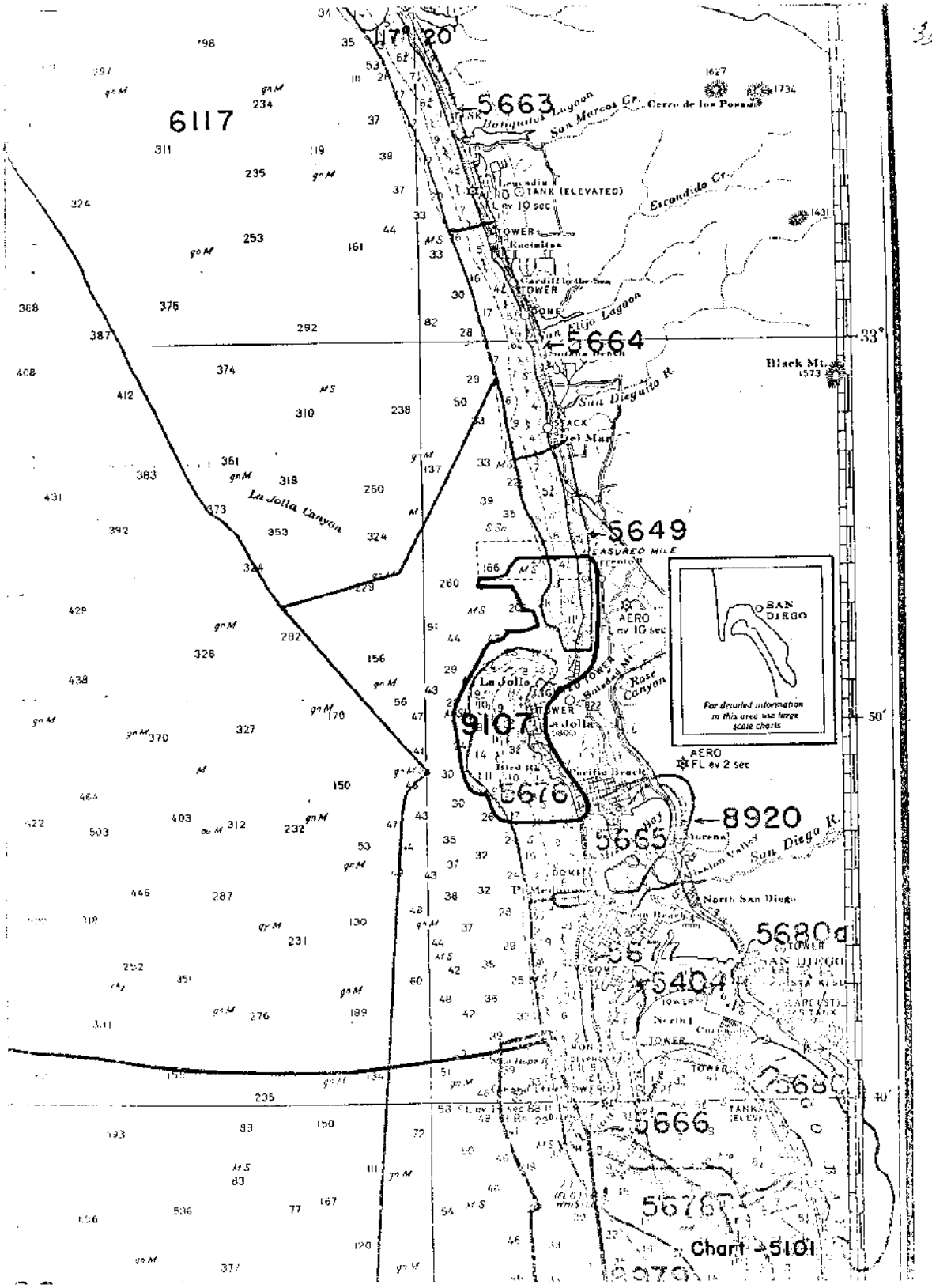
9. Additional Field Work

This is a very good basic survey and no additional hydrography is recommended.

Examined and Approved:

Chief
Marine Chart Division

Associate Director
Office of Marine Surveys
and Maps


117° 20'
6117
5663
Batiquitos Lagoon
San Marcos Cr.
Cerro de los Penas
Escondido Cr.
Black Mt.
1573
5664
33°
San Dieguito R.
La Jolla Canyon
5649
MEASURED MILE
AERO
FL ev 10 sec
SAN DIEGO
For detailed information in this area use large scale charts
AERO
FL ev 2 sec
La Jolla
Rose Canyon
9107
5676
8920
5665
Mission Valley
San Diego R.
North San Diego
5680a
5404
5666
5676a
Chart 5101
50'
40'

(8-25-69) NAUTICAL CHART DIVISION

(32)

RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. H-9107

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
5002	5-17-72	Jeffrey Stuart	~~Full~~ Part ~~Before~~ After Verification Review Inspection Signed Via (After / before)
18020			Drawing No.
5060	5-30-72	Jeffrey Stuart	~~Full~~ Part ~~Before~~ After Verification Review Inspection Signed Via (before)
18765			Drawing No.
5020	6-3-72	Howard Danley	~~Full~~ Part ~~Before~~ After Verification Review Inspection Signed Via (before)
18022			Drawing No.
5060	12-5-75	Ray Spence	Full ~~Part Before~~ After Verification Review Inspection Signed Via
18765			Drawing No. 8 (Fully Revised Hydro)
5101	8/10/75	DC Jason	Full ~~Part Before~~ After Verification Review Inspection Signed Via
(13740)			Drawing No. through 5060
5020	5-30-79	Hamilton RCS	Full ~~Part Before~~ After Verification Review Inspection Signed Via
(18022)			Drawing No. 40 Thru 18740 (5020) No Comm.
18020	6-25-79	Hamilton 1-17-80 RCS	Full ~~Part Before~~ After Verification Review Inspection Signed Via
(5002)			Drawing No. 32 thru cht 18022
			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.

FORM C&GS-8352 SUPERSEDES ALL EDITIONS OF FORM C&GS-975. USCOMM-DC 8558-P63