

8813

Diag. Cht. No. 904-2.

Form 504

U. S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Type of Survey HYDROGRAPHIC

Field No. Ex 5-1-64 Office No. H-8813

LOCALITY

State PUERTO RICO

General locality EAST COAST PUERTO RICO

Locality PLAYA DE FAJARDO

19 64

CHIEF OF PARTY

GLENN W. MOORE

LIBRARY & ARCHIVES

DATE

MAY 14 1965

COMM-DC 61300

8813

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-8813

Field No. Ex 5-1-64

State PUERTO RICO

General locality EAST COAST PUERTO RICO

Locality PLAYA DE FAJARDO

Scale 1:5,000 Date of survey 7 Mar. thru 15 May 1964

Instructions dated 3 December 1963

Vessel SHIP EXPLORER

Chief of party GLENN W. MOORE

Surveyed by SHIPS OFFICERS

Soundings taken by ~~athometer~~, graphic recorder, hand lead, ~~wire~~ Pole

Fathograms scaled by SHIP PERSONNEL

Fathograms checked by SHIP PERSONNEL

Protracted by ALPHA G. ATWILL

Soundings penciled by ALPHA G. ATWILL

Soundings in ~~fathoms~~ feet at MLW ~~mean~~

REMARKS:

9072

DESCRIPTIVE REPORT TO
ACCOMPANY HYDROGRAPHIC SURVEY

Register No. H-8813

Field No. EX 5-1-64

Season 1964

Scale 1:5,000

USC&GS Ship EXPLORER

Captain Glenn W. Moore

C. SOUNDING VESSEL:

All hydrography was accomplished with two hydrographic launches and one skiff. Launch #1 worked primarily on the southern portion and launch #2 worked primarily on the northern portion. The skiff worked on the shoreline and shoal areas.

Colors and day letters of the respective parties were as follows:

Launch #1 - purple lower-case day-letters.

Launch #2 - brown lower-case ~~day-letters.~~ *changed to red in S.S.*

Skiff - green lower-case day-letters.

D. SOUNDING EQUIPMENT:

Raytheon DE-723 echo fathometers were used in all vessels.

The hand lead was used for least depths and around piers and bulkheads. Echo sounder corrections were determined by bar checks, simultaneous comparisons and serial temperatures salinity observations. The calibrated speed of the fathometers was 800 fms/sec.

Fathometer serial numbers were as follows:

Launch #1 - #261 (7 thru 10 March 1964)
#807 (10 March thru 15 May, 1964)

Launch #2 - #255 (For whole sheet)

Skiff - #261 (For whole sheet)

Additional information may be found in the EXPLORER "Fathometer and Velocity Correction Report, OPR-423, 1964".

E. SMOOTH SHEET:

The smooth sheet was machine ruled in the Washington Office and is to be plotted by the Norfolk Regional Office, Processing Division.

F. CONTROL:

All hydrography was accomplished exclusively by visual control. The control was established entirely by photogrammetric means with the exception of eight hydrographic signals located by sextant, five of which were on Ramoys Island. No unusual or substandard methods were employed to established control, however, the five signals on Ramoys Island were poorly located. As these signals were blown down, a man on the island would set them back up sometimes in a location different than that plotted on the boatsheet. Hydrography positions, using these signals, should be checked very carefully with time, course, and speed before being accepted. *Information on courses was inadequate, and many fixes were weak.* Signal IRK and TIK were the same hydrographic signal. Signal QIT was on the "T" sheet, however, was not used on the boatsheet. All other hydrographic signals were acceptable. Additional information may be found in the "Control and Shoreline Report, OPR-423, 1964".

G. SHORELINE:

Sheets "T" - 12142 and 12146 were the source of shoreline on this hydrographic sheet. Both manuscripts used on this sheet were classified as "Advance" with a print date of May, 1962. Discrepancies were found on Ramoys Island and Cayo Ahogado, which seems to be caused by extreme wave action, and on Cayo Zancudo which is being changed by dredging on the Cayo in preparation for building of a hotel. On Cayo Obispo the marina has been completed with no more construction evident. In the vicinity of KUS and LUP the hotel has built a marina. The latitude and

Longitude of new bulkheads and piers are as follows:

1. Latitude 18° 20' 35" Longitude 65° 37' 15" CAYO OBISPO - See insert-
2. Latitude 18° 20' 10" Longitude 65° 37' 55"
3. Latitude 18° 21' 35" Longitude 65° 37' 33" EL CUSTADOR PIER - 2 E 3p (red)

The low water line is not fully delineated by soundings due to the small tide range. Additional information can be seen in the "Control and Shoreline Report, OPR-423, 1964".

H. **CROSSLINES:**

Crosslines were run to the extent of about 80/0. Agreement of all crosslines were within one foot. Discrepancies may be resolved when proper index and velocity corrections are made. Final comparison will be made by the smooth plotter.

I. **JUNCTIONS:**

Junctions were made with sheet No. H-8811 and H-2527. Soundings agree within one foot over the entire area, except in isolated cases when the difference may be as much as two feet. Discrepancies may be resolved when proper index and velocity corrections are made. Final comparison will be made by the smooth plotter. Agreement between the two launches and the skiff was within allowable limits.

J. Comparison of EX 5-1-64 with the following:

Latitude	Longitude	W/D Survey depth	Chart depth 917	Survey depth 1964	Reference Number
18-20-56 ⁹	65-36-48		18	21	(1)
18-20-37 ⁴⁰	65-36-45		10		(2)
18-19-00	65-37-15	10	10 & 13	11 & 13	(3)
18-19-22	65-37-15	14	NO INDICATION-16		(4)
18-20-06	65-36-53		32	17	(5)

See overlay and tabulated list of comparisons prepared by smooth plotter.

- (1) 18', 19', and 21' charted soundings don't match the current hydro in this area. The 21' sounding on the chart may be the same as the 21' recorded slightly to the North. No chart change is recommended in this area. See note A.
- (2) The 17' and 10' shoal in this area was not located as shown on the chart, but was located sufficiently to verify the chart.
- (3) The shoal in this area was verified, but not delineated.
- (4) There is no indication of this shoal on the cahar, or current survey, but W/D has a 14' sounding in the area. See note A.
- (5) Boat sheet shows a 17' sounding in the area where the chart has a 32' sounding. The soundings in this area appear to indicate that the charted shoal to the South has enlarged in a North easterly direction.

Latitude	Longitude	W/D	Chart	Survey	Reference
		Survey	depth	1964	
		depth	917	depth	Number
18-20-04	65-36-49		16	32'	(6)
18-19-57	65-36-51		18'	11	(7)
18-20-15	65-36-56	14	34	34	(8)
18-20-21	65-36-45		15	19	(9)
18-19-55	65-37-18		9	18	(10)

- (6) No indication of the charted 16' shoal was found. Boat sheet shows 32 and 33' soundings on either side of charted sounding. See note A.
- (7) The 11' sounding was not verified but the shoal in the area appears to be enlarging.
- (8) This sounding not verified, but the boat sheet and the chart are in very good agreement.
- (9) This shoal not verified, but the extent was not determined.
- (10) The shoal in this area was not located on the boat sheet. This shoal is assumed to exist as shown on the chart. *SEE NOTE A*

Latitude	Longitude	W/D Survey Depth	Chart Depth	1964 Survey Depth	Reference No.
18-19-18	65-37-16		16	23	(11)
18-19-06	65-37-15		16	23	(12)
18-19-40	65-37-00		12	36	(13)
18-19-44	65-37-30		30	16	(14)
18-20-39	65-37-00		20	12	(15)
18-20-51	65-37-00		9	(No indication)	(16)

(11) This pinnacle was not located. See note A.

(12) This sounding from the chart appears to be a pinnacle, no location was obtained. Note A.

(13) This sounding from the chart appears to be a pinnacle, no location was obtained. Note A.

(14) This shoal does not appear on the chart. The shoal was found and verified on the boat sheet.

Due to difficulty encountered with signals an Ramous Island a valid evaluation of the hydrography in the area can't be made until smooth plot is completed. See section F.

(15) This sounding appears to indicate a shoal not shown on the chart.

(16) This sounding appears on the chart, but not on the Boatsheet. See note A.

Note A. - In this area the bottom is comprised of numerous Coral pinnacles that require Wire Drag to locate or outline. All standard methods of echo sounding development were employed (circular development, very close line patterns and drifting). It is assumed that a definite determination of the existance of the pinnacles can not be obtained with a echo sounding instrument. The pinnacles located by previous Wire Drag surveys in the area were verified on this survey, but for the above reason a few were not located. These pinnacles should not be removed from the chart until wire drag can disprove.

COMPARISON WITH THE CHART: *See smooth pl. Her's overlay -*

Since the chart is a product of the prior surveys, a comparison of the boatsheet soundings with the CHART soundings is the same as a ----- Cont. next page

comparison of the boatsheet soundings with the PRIOR SURVEY soundings. (See section J. in this report for COMPARISON WITH PRIOR SURVEYS). Comparison with chart revealed same discrepancies as with prior survey.

L. ADEQUACY OF SURVEY:

This survey is complete and adequate, except for a small area around Ramoys Island where the signals were moved. This survey should supercede all prior surveys.

M. AIDS TO NAVIGATION:

All aids to navigation were compared with the U. S. Coast Guard Light List and found to be in complete agreement. There are no changes recommended to the aids to navigation in this area.

N. STATISTICS:

Launch #1

No. of Positions	1917
Nautical Miles of Sounding Lines	142.2

Launch #2

No. of Positions	1666
Nautical Miles of Sounding Lines	148.9

Skiff

No. of Positions	701
Nautical Miles of Sounding Lines	34.5
Total Area Surveyed in Square Nautical Miles	3.0

Q. MISCELLANEOUS:

P. RECOMMENDATIONS:

Q. REFERENCES:

- (3) Form 258 - Tide leveling Record 19 August 1964
- (1) Form 258 - Tide leveling Record 3 November 1964
- (2) Form 681 - Report of Tide Station 19 August 1964
- Form 504 - Control & Shoreline Report (To be submitted)
- Fathometer & Velocity Correction Report (To be submitted)

R. HYDROGRAPHY SIGNALS USED:

S I G N A L N A M E S

Sheet EX 5-1-64 (G)

<u>NAME</u>	<u>T-SHEET</u>	<u>PHOTO</u>	<u>NAME</u>	<u>T-SHEET</u>	<u>PHOTO</u>
ANY	12142	61W 1725	LAR	12142	61W 1725
BES	12146	61W 1724	LUP	12142	61W 1725
BOT	(sextant angles)		MAN	12146	61W 1722
CAR	12152	59S 3945	MIK	12146	(sextant angles)
CUP	(sextant angles)		MOM	12142	61W 1725
CUR	12142	61W 1725	NAN	12142	61W 1725
DIP	12146	61W 1722	NIX	12146	61W 1723
EGO	12142	61W 1725	NOT	12146	61W 1724
ELM	12146	61W 1722	ORB	12146	61W 1723
EME			ORF	12142	61W 1725
FAT	12146	61W 1722	OUT	12146	61W 1723
FIN	12142	61W 1725	PET	12146	61W 1723
FUN	12146	61W 1722	PIE	12142	61W 1725
GAL	12146	61W 1722	QIT	12142	61W 1735
GUS	12146	61W 1722	RAM	(sextant angles)	(Not used)
HAM	12142	61W 1725	SIC	12146	61W 1724
HON	12146	61W 1722	TAP	12146	61W 1724
IDA	12146	61W 1722	THY	12146	61W 1724
IRK or TIK	12142	61W 1725	TUX	(sextant angles)	
			VAL	12146	61W 1724

See Norfolk office list of signals

<u>NAME</u>	<u>T-SHEET</u>	<u>PHOTO</u>	<u>NAME</u>	<u>T-SHEET</u>	<u>PHOTO</u>
JIP	12142	61W 1725	VIM	12146	61W 1724
JOY	(sextant angles)		WAX	12146	61W 1724
JUT	12146	61W 1724	YAK	12146	61W 1724
KID	(sextant angles)		ZAG	12146	61W 1724
KUS	12142	61W 1725			
LEO	(sextant angles)				

S. TIDE NOTE:

Tide reducers were obtained from the Portable Tide Gage maintained at Playa de Fajardo, Puerto Rico.

The Playa de Fajardo Portable Tide Gage is located at latitude $18^{\circ} 20.16'$ N and longitude $65^{\circ} 37.76'$ W and the Time Meridian is the 60 th. Mean Low Water, as furnished by the Washington Office, was 2.0 feet above Staff Zero. The staff was installed in early February and taken out in May.

For additional information see "Report of Tide Stations, OPR-423".

T. FATHOMETER DATA:

See "Fathometer and Velocity Correction Report, OPR-423, 1964".

Approved

Marviah T. Paulson
CDR., USC&GS
Comdg., Ship EXPLORER

Respectively Submitted

Jeffrey L. Gammon
Ens. J. Gammon

A. PROJECT:

Hydrography was accomplished in accordance with instructions for Project OPR-423, dated 26 December 1961, and supplemental instructions dated 3 December 1963.

B. AREA SURVEYED:

This sheet covers an area on the East Coast of Puerto Rico, in the harbor and adjacent areas of Playa de Fajardo. The sheet limits are bounded on the west by shoreline; north by latitude $18^{\circ} 22.00'$; south by latitude $18^{\circ} 18.5' N.$ and the easterly limit by longitude $65^{\circ} 36.75' W.$ The survey makes a junction on the east with contemporary survey EX 10-1-64 and to the south with contemporary survey EX 10-3-62. Hydrography was begun on 7 March 1964 and ended on 15 May 1964.

The survey makes the following ^{overlap} ~~junctions~~ with prior surveys;

<u>Register No.</u>	<u>Scale</u>	<u>Date</u>
H-4288WD	1:20,000	1921-26
H-2527	1:20,000	1901 -02
H-2476	1:10,000	1900

Junctions were made with contemporary survey as follows:

<u>Register No.</u>	<u>Field Number</u>	<u>Date</u>
H-8811	EX 10-3-62	1962-64
H-2527	EX 10-1-64	1964

?

H8814

NORFOLK HYDROGRAPHIC PROCESSING BRANCH
 FLOATING AIDS TO NAVIGATION
 H-8813

<u>BUOY</u>	<u>LATITUDE</u>	<u>LONGITUDE</u>	<u>DEPTH</u>	<u>POS.</u>	<u>DATE</u>
<u>BAJA LAJA</u>					
Lighted Buoy 1	18-21+45"	65-37-04"	31	149J(red)	3/30/64
Bell Buoy 3	21-21	37-08	29	3n "	4/20/64
South End Buoy 2	21-11	37-05	30	2n "	"
Fifteen Foot Spot Buoy 1	20-54	37-02	37	131J "	3/30/64
Baja Onaway L'td. Buoy 5	20-43	37-30	22	1n	4/20/64

NORFOLK PROCESSING BRANCH
CHART COMPARISON

<u>LATITUDE</u>	<u>LONGITUDE</u>	<u>CHART 921</u>	<u>SMOOTH SHEET</u>	<u>REMARKS</u>
18-21-53"	65-37-00"	30'	37'	
21-52	36-57	30	32	
22-00	36-45	Chart	shows 30' curve extending to this area	
		sheet	shows more than 30'	
21-15	37-05	-	7	Shoalest sounding - 67-68 1 (red)
21-19	37-05	10	27	
20-52	36-59	9	38	
20-55	37-12	17	32	
20-48	37-47	11	Not found	
20-48	37-20	8	Not found	
20-39	37-23	3	Not found	
20-37	37-32	18	22	
20-35	37-44	11	17	
20-05	37-35			Four rocks charted - Not found
20-20	37-27	17	20	
20-19	37-29	18	14	
20-18	37-14	7	1	Area being dredged
20-11	36-57	18	38	
20-09	36-54	38	29	
20-22	36-47	15	14	Least depth - 106-107k
20-08	36-51	38	25	
20-40	36-45	10	30	
20-38	36-45	17	32	
19-55	36-43	14	-	Area not fully developed
19-45	36-42	18	34	
19-58	36-52	13	10	
19-35	37-00	30	36	
19-55	37-09	-	18	
19-45	37-07	5	21	
19-48	37-16	7	12	
19-40	37-17	9	15	
19-35	37-25	9	14	Eleven feet to Southward
19-30	36-50	30	23	
19-20	36-58	17	11	
19-24	36-53	-	18	Three 18' sdgs. this area
19-07	37-16	16	24	
19-12	36-53	20	18	

R. HYDROGRAPHY SIGNALS USED:

S I G N A L N A M E S

Sheet EX 5-1-64 (G)

<u>NAME</u>	<u>T-SHEET</u>	<u>NAME</u>	<u>T-SHEET</u>
ANY	12142	LAR	12142
BOX	Hydro Signal	LUP	12142
BES	12146	MAN	12146
BOT <i>T-12148</i>	(sextant angles)	MIK	12146
CAR	12152	MOM	12142
<i>Not used -</i> CUP <i>T-12148</i>	(sextant angles)	NAN	12142
CUR	12142	NIX	12146
DIP	12146	NOT	12146
EGO	12142	NUX	Hydro Signal
ELM	12146	ORB	12146
FAT	12146	ORF	12142
FIN	12142	OUT	12146
FUN	12146	PET	12146
FOX	Hydro Signal	PIE	12142
GAL	12146	QIT	12142
GUS	12146	RAM <i>T-12148</i>	(sextant angles)
HAM	12142	RAY -	<i>Hydro -</i>
HON	12146	SIC	12146
IDA	12146	SUP	Hydro Signal
(IRK or	12142	TAP	12146
TIK		THY	12146
JIP	12142	<i>Not used -</i> TUX <i>T-12148</i>	(sextant angles)
JOY <i>T-12148</i>	(sextant angles)	VAL	12146
JUT	12146	VIM	12146
KID <i>T-12148</i>	(sextant angles)	WAX	12146
KUS	12142	YAK	12146
LEO <i>T-12146</i>	(sextant angles)	ZAG	12146

NORFOLK RECORDS PROCESSING BRANCH
ADDENDUM
To Accompany

HYDROGRAPHIC SURVEY H-8813 (Ex 5-1-64)

GENERAL

Except for some lack of development in shoal areas, and possible position displacement because of the control problems listed below, this appears to be a reasonably good basic survey. Soundings are in good agreement at crossings and depth curves follow normal patterns considering the irregular character of the bottom in this area.

CONTROL

There were a great many swingers and weak fixes on this survey. These factors, combined with erratic times and courses plus indications of loose photo-hydro positioning, made it extremely difficult to pin-point control weaknesses.

As mentioned in paragraph "H", the locations of all stations on Ramos Island are questionable. Station TUX was not used at all as the entire point was washed away before the survey was started. This erosion was reported orally by ships officers and confirmed by sounding line 2 - 3f (green). The shoreline change was not shown on the smooth sheet as no information was furnished.

TUX was rebuilt and located by sextant (see cut volume) about 100 meters to the North and renamed FOX, BOX and NUX to indicate the various locations it was supposed to have been placed by a cooperative resident of the island. Sextant angles locating these points plotted so poorly it was difficult to determine if there should be one location or the three stations as plotted. However, signal FOX was used for plotting the smooth sheet as this point made time and course check better than the other two stations.

Station CUP was relocated on rather questionable sextant angles and renamed SUP.

According to paragraph "F", other stations on Ramos Island were relocated by sextant, however, these angles plotted so poorly it was considered advisable to hold the original photo-hydro positions.

SHORELINE

Shoreline for Ramos Island and adjacent areas falling South of T-12146 was enlarged graphically from 1:10,000 compilations and left in pencil on the smooth sheet.

continued

CHART COMPARISON

The smooth plotter has prepared an overlay showing a detailed comparison with chart 921. This overlay and a tabulated list of comparisons will be submitted with the smooth sheet.

DISCREPANCIES

Positions 18 through 28a (green) are not smooth plotted. Information on the location of these positions was insufficient. Area is presumed to be in the vicinity of Lat. 18-19.0' and Long. 65-37.8' but the sketch in volume 1 does not conform to topography and positions are not plotted on the boat sheet.

Respectfully submitted,

Hugh L. Proffitt

Hugh L. Proffitt
Cartographer

Norfolk, Va.
8 June 1965

HYDROGRAPHIC SURVEY STATISTICS
HYDROGRAPHIC SURVEY NO. 8813

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

RECORD DESCRIPTION		AMOUNT	RECORD DESCRIPTION		AMOUNT	
SMOOTH SHEET		1	BOAT SHEETS		3	
DESCRIPTIVE REPORT		1	OVERLAYS		5	
DESCRIPTION	DEPTH RECORDS	HORIZ. CONT. RECORDS	PRINTOUTS	TAPE ROLLS	PUNCHED CARDS	ABSTRACTS/ SOURCE DOCUMENTS
ENVELOPES						
CAHIERS	2					
VOLUMES	22					
BOXES						

T-SHEET PRINTS (*List*)
Blackline Prints T-12142 and T-12146

SPECIAL REPORTS (*List*)

OFFICE PROCESSING ACTIVITIES

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

PROCESSING ACTIVITY	AMOUNTS			TOTALS
	PRE-VERIFICATION	VERIFICATION	REVIEW	
POSITIONS ON SHEET				
POSITIONS CHECKED				
POSITIONS REVISED				
DEPTH SOUNDINGS REVISED				
DEPTH SOUNDINGS ERRONEOUSLY SPACED				
SIGNALS ERRONEOUSLY PLOTTED OR TRANSFERRED				
	TIME (MANHOURS)			
TOPOGRAPHIC DETAILS				
JUNCTIONS				
VERIFICATION OF SOUNDINGS FROM GRAPHIC RECORDS				
SPECIAL ADJUSTMENTS				
ALL OTHER WORK				
TOTALS				
PRE-VERIFICATION BY	BEGINNING DATE		ENDING DATE	
VERIFICATION BY	BEGINNING DATE		ENDING DATE	
REVIEW BY	BEGINNING DATE		ENDING DATE	

VERIFIER'S REPORT
HYDROGRAPHIC SURVEY, H18813

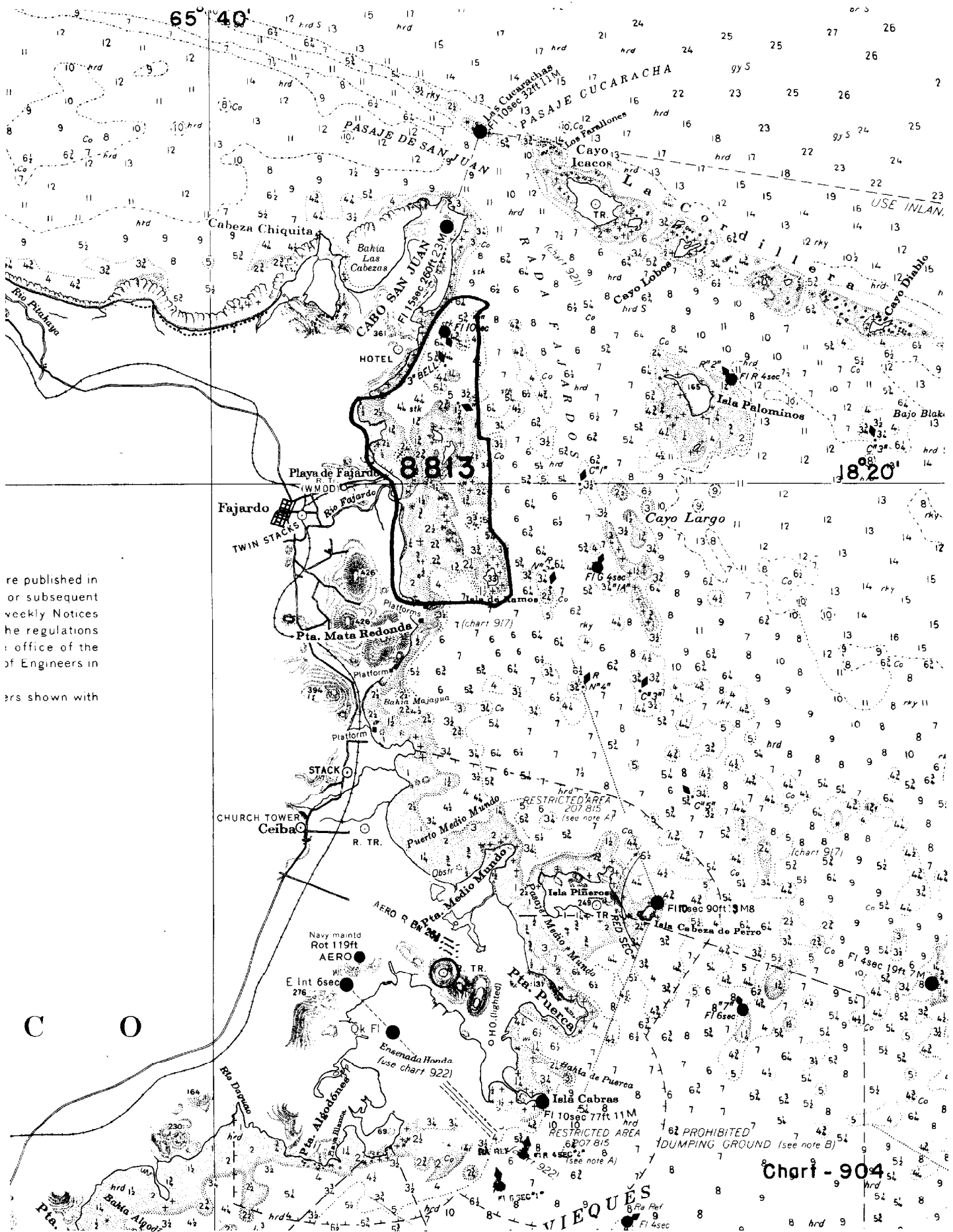
INSTRUCTIONS - This form serves to identify items of a checklist in verification together with items which are separately reported to the Reviewer. The form is not to be forwarded to the Reviewer. A report, which is prepared for the Reviewer, should identify items by number and letter and will be filed in the Descriptive Report until the survey is reviewed.

CL - Check List Items: should be checked as having been completed during the verification processes.

R - Report Item: This column refers to those items reported to the reviewer and is used to indicate the items discussed.

Part I - DESCRIPTIVE REPORT	CL	R	Part III - JUNCTIONS (Continued)	CL	R
<p>Note: The verifier should first read the Descriptive Report for general information and problems.</p> <p>1. The Descriptive Report was consulted, paragraphs checked if found satisfactory, and notations were made in soft black pencil regarding action taken. Remarks Required: -- None</p>			<p>10. Junctions with contemporary surveys were satisfactory except as follows: Remarks Required: -- Consider conditions after adjustments have been made; note adjustments made. Make special notes of Butt junctions and areas which are SUPERSEDED.</p>		
<p>2. Soundings originating with the survey and mentioned in the Descriptive Report have been verified and checked in soft black pencil, including latitude and longitude, together with position identification. Remarks Required: -- None</p>			<p>Part IV - VOLUMES 11. All items affecting the plotting of the survey which are entered in the remarks columns of the sounding records were noted and check marked. In all cases appropriate action was taken and exceptions noted in the volumes. Remarks Required: -- None</p>		
<p>3. All reference to survey sheets mentioned in the Descriptive Report should include registry number and year. Remarks Required: -- None</p>					
<p>Part II - SHORELINE AND SIGNALS 4. Source of shoreline signals Remarks Required: -- List all surveys</p> <p>a. Give earliest and latest dates of photographs b. Field inspection date c. Field Edit date d. Reviewed-Unreviewed</p>			<p>12. Condition of sounding records was satisfactory except as follows: Remarks Required: -- Mention deficiencies in completeness of notes or actions for the following: (a) rocks (b) line turns (c) position values of beginning and ending of lines (d) bar check or velocity correctors (e) time recording (f) notes or markings on fathograms (g) was reduction of soundings accurately done? (h) was scanning accurate? (i) were peaks at uneven intervals missed? (j) were stamps completed? (k) references to adjacent features</p>		
<p>5. The transfer of contemporary topographic information was carefully examined and reconciled with the hydrography. Remarks Required: -- Discuss remaining differences.</p>					
<p>6. The plotting of all triangulation stations, topographic stations and hydrographic signals has been checked and noted in processing stamp No. 42 on the smooth sheet. Remarks Required: -- None</p>					
<p>7. Objects on which signals are located and which fall outside of the high-water line have been described on the sheet. Remarks Required: -- List those signals still unidentified.</p>			<p>Part V - PROTRACTING 13. All positions verified instrumentally were check marked in color in the sounding records, and verifier initialed the processing stamp. Remarks Required: -- None</p>		
<p>Part III - JUNCTIONS Note: Make a cursory comparison preliminary to inking soundings in area of overlap.</p> <p>8. All junctions of contemporary or overlapping sheets were transferred in colored ink and overlapping curves were made identical. Remarks Required: -- None</p>			<p>14. The protracting and plotting of all unsatisfactory crossings were verified. Remarks Required: -- None</p>		
<p>9. The notation in slanted lettering "JOINS H---- (19)" was added in colored ink for all verified contemporary adjoining or overlapping sheets. Those not verified are shown in pencil. Remarks Required: -- None</p>			<p>15. All detached positions locating critical soundings, rocks, buoys, breakers, obstructions, kelp, etc., were verified and the position numbers are legible. Remarks Required: -- None</p>		

Part V - PROTRACTING (Continued)	CL	R	Part VIII - AIDS TO NAVIGATION	CL	R
16. The protracting was satisfactory except as follows: Remarks Required: -- Refers to protracting in general except for specific faults repeated often, or faults in control information, which required considerable replotting or adjustments.			26. All fixed aids located together with those on the contemporary topographic sheets, have been shown on the survey. Remarks Required: -- Conflicts of any nature listed.		
17. The protractor has been checked within the last three months. Remarks Required: -- Date of check, type of protractor and number.			27. All floating aids listed in the Descriptive Report should be verified and checked in soft black pencil, including latitude and longitude and position identification. Remarks Required: -- None		
Part VI - SOUNDINGS			Part IX - BOAT SHEET		
18. All soundings are clear and legible, and critical soundings are a little larger than adjacent soundings. Remarks Required: -- None			28. The boat sheet was constantly compared with the smooth sheet with reference to notes, position of sounding lines and supplemental information. Remarks Required: -- None		
19. Sounding line crossings were satisfactory except as follows: Remarks Required: -- Discuss adjustments.			29. Heights of rocks awash were correctly reduced and compared with topographic information. Remarks Required: -- Note excessive conflicts with topographic information.		
20. The spacing of soundings as recorded in the records was closely followed; Remarks Required: -- None			Part X - GENERAL		
21. The scanning, reduction, spacing, plotting of questionable soundings have been verified. Remarks Required: -- None			30. All information on the sheet is shown in accordance with figures 82 and 83 in the Hydrographic Manual (Pub. 20-2). Remarks Required: -- None		
22. The smooth plotting of soundings was satisfactory except as follows: Remarks Required: -- Refer to legibility, errors in spacing, and errors in numbers - but not to errors in scanning.			31. Unnecessary pencil notes have been removed from the sheet. Remarks Required: -- None		
Part VII - CURVES			32. Degree, minute values and symbols have been checked; also electronic distance arcs have been properly identified and checked on the smooth sheet. Remarks Required: -- None		
23. The depth curves have been inspected before inking. Remarks Required: -- By whom was the penciled curves inspected. 24. The low-water line and delineation of shoal areas have been properly shown in accordance with the following: a. From T-Sheet in dotted black lines b. From soundings in orange c. Approximate position of sketched curve is dashed orange d. Approximate position of shoal area not sounded in black dashed Remarks Required: -- None			33. The bottom characteristics are adequately shown. Remarks Required: -- None		
25. Depth curves were satisfactory except as follows: (This statement should not refer to the manner in which the curves were drawn). Remarks Required: -- Indicate areas where curves could not be drawn completely because of lack of soundings. For some inshore areas a general statement is sufficient.			34. Unresolved discrepancies and questionable soundings. Part XI - NOTES TO THE REVIEWER 35. Notation of discrepancies with photogrammetric survey inserted in report of unreviewed photogrammetric survey or on copy.		
Verified by			36. Supplemental information.		
				Date	



re published in
 or subsequent
 weekly Notices
 he regulations
 office of the
 of Engineers in
 ers shown with

Chart - 904

Partially applied to chart 921 before V&R 8-12-65 RKD

Partially applied to chart 917 before V&R. Area
covered by chart 921 applied then that chart
8-12-65 RKD