

13135

13135

Form 504	
U. S. DEPARTMENT OF COMMERCE	
COAST AND GEODETIC SURVEY	
DESCRIPTIVE REPORT	
Type of Survey	Shoreline (Photogrammetric)
Field No.	Office No. T-13135
LOCALITY	
State	Puerto Rico
General locality	Southwest Coast
Locality	Bahia De Guayanilla
1966-69	
CHIEF OF PARTY	
Alfred C. Holmes, Director, AMC	
LIBRARY & ARCHIVES	
DATE	

DESCRIPTIVE REPORT - DATA RECORD

T -13135

OBJECT NO. (II):

PH-6708

FIELD OFFICE (II):

None

CHIEF OF PARTY

PHOTOGRAMMETRIC OFFICE (III):

Atlantic Marine Center, Norfolk, VA

OFFICER-IN-CHARGE

Alfred C. Holmes, Director

INSTRUCTIONS DATED (II) (III):

OFFICE - Nov. 14, 1967
OFFICE - SUPPLEMENT 1 - Nov. 4, 1968
OFFICE AMENDMENT 1 - Dec. 9, 1968

METHOD OF COMPILATION (III):

Wild B-8 Plotter

MANUSCRIPT SCALE (III):

1:5,000

STEREOSCOPIC PLOTTING INSTRUMENT SCALE (III):

1:2,500 Pantographed To 1:5,000

DATE RECEIVED IN WASHINGTON OFFICE (IV):

DATE REPORTED TO NAUTICAL CHART BRANCH (IV):

APPLIED TO CHART NO.

DATE:

DATE REGISTERED (IV):

JUN 1975

GEOGRAPHIC DATUM (III):

Puerto Rico

VERTICAL DATUM (III):

MEAN ~~LOW WATER~~ ^{HIGH WATER} EXCEPT AS FOLLOWS:

Elevations shown as (25) refer to mean high water

Elevations shown as (5) refer to sounding datum

i.e., mean low water ~~as shown on chart~~

REFERENCE STATION (III):

Turn 2, 1966

LAT.:

18°00'12"60435 (387.5)M

LONG.:

60°45'34"29368 (1008.8)M

☒ ADJUSTED☐ UNADJUSTED

PLANE COORDINATES (IV):

y = 61,889.74 Ft.

x = 386,662.64 Ft.

STATE

Puerto Rico

ZONE

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NUMERALS INDICATE WHETHER THE ITEM IS TO BE ENTERED BY (II) FIELD PARTY, (III) PHOTOGRAMMETRIC OFFICE,
OR (IV) WASHINGTON OFFICE.

WHEN ENTERING NAMES OF PERSONNEL ON THIS RECORD GIVE THE SURNAME AND INITIALS, NOT INITIALS ONLY.

DESCRIPTIVE REPORT - DATA RECORD

T-13135

FIELD INSPECTION BY (II):		DATE:
None		
MEAN HIGH WATER LOCATION (III) (STATE DATE AND METHOD OF LOCATION):		
Air Photo Compilation - Date of Photography - Nov. 15, 16, 1966		
PROJECTION AND GRIDS RULED BY (IV):		DATE
A. Bethea		Oct. 10, 1968
PROJECTION AND GRIDS CHECKED BY (IV):		DATE
L. F. Van Scoy		Oct. 14, 1968
CONTROL PLOTTED BY (III):		DATE
Aerotriangulation Points: - J. Steinberg Triangulation Stations: - None		Nov. 8, 1968
CONTROL CHECKED BY (III):		DATE
Aerotriangulation Points: - B. Nicholson Triangulation Stations: - None		Nov. 8, 1968
RADIAL PLOT OR STEREOSCOPIC CONTROL EXTENSION BY (III):		DATE
I. I. Saperstein		Oct. 31, 1967
STEREOSCOPIC INSTRUMENT COMPILATION (III): Wild B-8	PLANIMETRY By: R. White	DATE Dec. 12, 1968
	Reviewed By: A. Shands	Dec. 12, 1968
	CONTOURS Inapplicable	DATE
MANUSCRIPT DELINEATED BY (III):		DATE
R. White		Jan. 24, 1969
SCRIBING BY (III):		DATE
W. Gilbert		7/11/72
PHOTOGRAMMETRIC OFFICE REVIEW BY (III):		DATE
Compilation: C.H. Bishop Field Edit: L.O. Neterer Jr. Scribing and Stick Up: F. Margiotta		Jan. 24, 1969 3/18/69 7/72 - 8/72
REMARKS:		
Field Edit By: - R. E. Kesselring		
DATE: Feb. 1969		

DESCRIPTIVE REPORT - DATA RECORD

T-13135

MERA (KIND OR SOURCE) (III):

U.S.C.&G.S. Types "L" & "M" Wild RC-8 & RC-9

PHOTOGRAPHS (III)

NUMBER	DATE	TIME	SCALE	STAGE OF TIDE
66-L-8482 thru 66-L-884	Nov. 16, 1966	0900	1:15,000	0.50 above MLW
70-E-6055 and 70-E6056	Mar. 5, 1970	0924	1:15,000	0.45 " "

PREDICTED TIDE (III)

DIURNAL

		RATIO OF RANGES	MEAN RANGE	MEAN RANGE
REFERENCE STATION: Galveston, Texas				1.4
SUBORDINATE STATION: Playa De Ponce, P.R.		0.57		0.4
SUBORDINATE STATION:				
WASHINGTON OFFICE REVIEW BY (IV): Bernard Kurs, AMC		DATE: Jan. 1973		
PROOF EDIT BY (IV):		DATE:		
NUMBER OF TRIANGULATION STATIONS SEARCHED FOR (II): None	RECOVERED: None	IDENTIFIED: None		
NUMBER OF BM(S) SEARCHED FOR (II): None	RECOVERED: None	IDENTIFIED: None		
NUMBER OF RECOVERABLE PHOTO STATIONS ESTABLISHED (III):		None		
NUMBER OF TEMPORARY PHOTO HYDRO STATIONS ESTABLISHED (III):		None		

REMARKS:

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T-13135

COMPILATION RECORD

COMPLETION DATE

REMARKS

Alongshore Area For Hydro.	Jan. 1969	Superseded
Field Edit Applied. Changes Made From Photography of May 1969 and March 1970	April 6, 1971	Superseded
Final Review	Jan. 1973	

SUMMARY TO ACCOMPANY

DESCRIPTIVE REPORT

T-13135

Shoreline survey T-13135 is one of twenty-one similar surveys in project PH-6708. The project is on the south shore of Puerto Rico and extends from Cabo Rojo to Cayo Berberia. This survey covers the northwestern section of the Bahia De Guanilla.

There was no field work prior to the compilation of this manuscript.

Compilation was by B-8 plotter using November, 1966 photography at 1:5,000 scale. (see item 31 of compilation report) A copy of the incomplete manuscript along with ozalids and specially prepared photographs were furnished for the preparation of the boat sheet, location of photo-hydro signals and field edit use.

The manuscript was a vinylite sheet 20 minutes latitude by 2 minutes longitude. After field edit was applied, 1970 photography was utilized to make minor changes at the mouth of the Rio Guanilla, (an area subject to frequent changes), the manuscript was scribed, stuck-up and reproduced on cronaflex. Final Review was at AMC in January, 1973. One cronaflex and negative of the final reviewed survey are forwarded for record and registry.

FIELD INSPECTION REPORT
PH-6708
T-13135

There was no field inspection prior to compilation.

PHOTOGRAMMETRIC PLOT REPORT

Job PH-6708

Puerto Rico

October 31, 1967

21. Area Covered

This report covers the southwest part of Puerto Rico, consisting of eight (8) 1:10,000 scale T-sheets, T-13118 thru T-13125, and thirteen (13) 1:5,000 scale T-sheets, T-13128 thru T-13140. Photography covering sheets T-13126 and T-13127 was not bridged at this time due to lack of control.

22. Method

Analytic aerotriangulation methods were used to bridge Strip 1, 1:60,000 scale color diapositives, using premarked and office identified control. Numerous tie points were located to control the compilation photography. Strips 3, 5, 5A, 6, 7 and 8 were bridged by analytic methods. Strips 2 and 4 were bridged by stereoplanigraph in order to facilitate the work.

The attached sketch of the strips bridged shows the placement of triangulation used in the final strip adjustment. Closures to control are shown for each strip on the IBM readout, along with all bridge points on Puerto Rico plane coordinates.

23. Adequacy of Control

Horizontal control is adequate to control Strip 1. All other strips were bridged using tie points and horizontal control and is adequate.

The premarked paneling at station PAGEN was removed prior to photography and the subpoint could not be identified. It was decided, therefore, to end Strip 1 with photo 66-M-625 and Strip 6 with photo 66-L-8433. However, it is believed that sheet T-13125 can be adequately compiled.

Station GUANICA L.H. 1900 does not have a valid position. Geodesy did not tie to this station during the 1966 work, and no adjustment was made to the new Puerto Rico datum. (Station has been reported destroyed.) The positions shown on Form 725d computed by Geodesy is arbitrary. Therefore, GUANICA L.H. Subpoint 1 and subpoint 2 are unreliable and were not held in the bridge.

It is to be noted that all horizontal control used on this job and the final pass point positions are on the new Puerto Rico Datum. A Xerox copy of triangulation station positions issued by Geodesy is submitted to the Compilation office with this job. Previously published GP's and plane coordinates should not be used for plotting.

24. Supplemental Data

Vertical control needed for the adjustment was taken from USGS quadrangles.

25. Photography

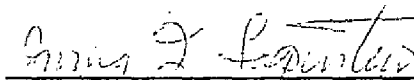
The definition and quality of the RC-9 "M" and RC-8 "L" color photography was fair and good respectively. Smoke covers parts of some photographs on Strips 3 and 5A, but should not hinder compilation of the shoreline.

Although sheets T-13137 thru T-13140 are covered by 1:15,000 scale photographs, these photographs were not bridged, nor can they be used for compilation on the plotter because of water areas. Strip 3, therefore, should be used to compile the above sheets.

Ratio prints have been ordered for the 1:30,000 and 1:15,000 scale photographs to compilation scale, on black and white base.

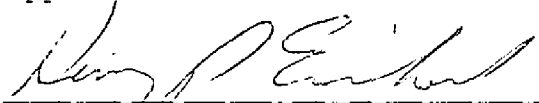
Several points were transferred to ratio print 66-L-8394 in order that a reef on T-13140 may be compiled graphically.

Respectfully submitted



I. I. Saperstein

Approved and Forwarded



Henry P. Eichert, Chief
Aerotriangulation Section

DESCRIPTIVE REPORT CONTROL RECORD

SCALE FACTOR None

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR Y COORDINATE LONGITUDE OR X COORDINATE	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS ($\sqrt{E} = 3048006 \text{ meters}$) FORWARD (BACK)
*Guanilla, Central Refinery, Stack, 1969	Form C&GS 567, 1969	Puerto Rico	18-00- 1257.7 (586.9) 66-47- 1146.7 (618.3)	2515.4 (1173.8) 2293.4 (1236.6)
*Use With Caution				
The source of this position is C&GS 567 At this time, it is believed to be an uncorrected field position. The Datum is also unknown.				
COMPUTED BY Bernard Kurs	DATE 12/20/72	CHECKED BY C.H. Bishop	DATE 12/20/72	//

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COMPILATION REPORT

PH-6708

T-13135

31. DELINEATION

Refer to Photogrammetric Plot Report - Job PH-6708, Puerto Rico, dated Oct. 31, 1967. Specifically Item 25 - Photography, Paragraph 2.

In order to use Strip 3 to compile T-13137 thru T-13140, it was necessary to plot controls and compile on worksheets at 1:6,000 scale and photographically enlarge to 1:5,000 scale (see Amendment I to office instructions, dated Dec. 9, 1968).

The enlargement ratio required to compile at 1:5,000 scale from 1:30,000 scale bridge strip 3 with the B-8 plotter was not possible. It was, therefore considered more expedient to compile T-13135 thru T-13140 at 1:6,000 scale, drop shoreline pass points common to both the 1:15,000 photos and the 1:30,000 models, and then enlarge photographically to 1:5,000 scale, at a ratio of $1 = 1.2$.

This enlargement was then transferred to the 1:5,000 manuscripts and the 1:5,000 scale ratio prints processed for hydro. support data.

The use of the 1:30,000 scale models from strip 3, enabled the compiler to adequately cover all inshore areas and much of the offshore areas of shoal, coral reefs, small islands and etc., which would not have been possible with the 1:15,000 offshore photos which were not bridged.

The alongshore and shoreline features of the mainland were further refined with the models set utilizing the 1:15,000 scale inshore plates: - 66L(c) 8475 thru 8484.

32. CONTROL

See Photogrammetric Plot Report dated October 31, 1967.

33. SUPPLEMENTAL DATA

None

34. CONTOURS AND DRAINAGE

Inapplicable

35. SHORELINE AND ALONGSHORE DETAILS

See Paragraph 31. No low water line was delineated. All details were compiled from office interpretation of the photographs.

36. OFFSHORE DETAILS

No statement.

37. LANDMARKS AND AIDS

None

38. CONTROL FOR FUTURE SURVEYS

No recoverable topographic or photo hydro stations have been shown; however, a sufficient number of shoreline pass points have been shown as an aid for the Hydrographer in establishing hydrographic signals.

39. JUNCTIONS

Junctions are in agreement with T-13136 to the East, T-13137 to the South, and T-13133 to the West, South of latitude 18°00'00", all of which are 1:5,000 scale. There is no contemporary survey to the North and the West North of latitude 18°00'00".

40. HORIZONTAL AND VERTICAL ACCURACY

No statement.

46. COMPARISON WITH EXISTING MAPS

A comparison has been made with USGS Quadrangle PUNTA VERRACO, PR, scale 1:20,000 dated 1958.

47. COMPARISON WITH NAUTICAL CHARTS

A comparison has been made with USC&GS Chart 928, BAHIA DE GUAYANILLA, scale 1:10,000, 5th edition, dated October 18, 1965.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

None

ITEMS TO BE CARRIED FORWARD

None

Submitted:

Bernard Lewis for

Richard R. White
Cartographic Aid

Approved:

Alfred C. Holmes

Alfred C. Holmes, RADM, NOAA
Director, Atlantic Marine Center

December 11, 1972

GEOGRAPHIC NAMES

FINAL NAME SHEETS

Ph-6708 (Puerto Rico)

TP-13135

Bahia de Guayanilla

Playa de Guayanilla

Puerto de Guayanilla

Punta Verraco

Rio Guayanilla

Approved:

A. J. Wright
A. Joseph Wright
Chief Geographer

Prepared by:

Charles E. Harrington
Charles E. Harrington
Cartographer

T-13135

49. NOTES FOR THE HYDROGRAPHER:

NONE.

FORM C&GS-1002 (9-66)		U.S. DEPARTMENT OF COMMERCE ESSA COAST AND GEODETIC SURVEY	
PHOTOGRAMMETRIC OFFICE REVIEW T.13135			
1. PROJECTION AND GRIDS CHB	2. TITLE CHB	3. MANUSCRIPT NUMBERS CHB	4. MANUSCRIPT SIZE CHB
CONTROL STATIONS			
5. HORIZONTAL CONTROL STATIONS OF THIRD-ORDER OR HIGHER ACCURACY None	6. RECOVERABLE HORIZONTAL STATIONS OF LESS THAN THIRD-ORDER ACCURACY (Topographic stations) XX		7. PHOTO HYDRO STATIONS XX
8. BENCH MARKS X	9. PLOTTING OF SEXTANT FIXES R.J.P.	10. PHOTOGRAMMETRIC PLOT REPORT CHB	11. DETAIL POINTS CHB
ALONGSHORE AREAS (Nautical Chart Data)			
12. SHORELINE CHB	13. LOW-WATER LINE CHB	14. ROCKS, SHOALS, ETC. CHB	15. BRIDGES CHB
16. AIDS TO NAVIGATION R.J.P.	17. LANDMARKS R.J.P.	18. OTHER ALONGSHORE PHYSICAL FEATURES CHB	19. OTHER ALONGSHORE CULTURAL FEATURES
PHYSICAL FEATURES			
20. WATER FEATURES CHB	21. NATURAL GROUND COVER CHB		22. PLANETABLE CONTOURS XX
23. STEREOSCOPIC INSTRUMENT CONTOURS XX	24. CONTOURS IN GENERAL XX	25. SPOT ELEVATIONS XX	26. OTHER PHYSICAL FEATURES
CULTURAL FEATURES			
27. ROADS CHB	28. BUILDINGS CHB	29. RAILROADS CHB	30. OTHER CULTURAL FEATURES CHB
BOUNDARIES			
31. BOUNDARY LINES XX		32. PUBLIC LAND LINES XX	
MISCELLANEOUS			
33. GEOGRAPHIC NAMES R.J.P.	34. JUNCTIONS R.J.P.		35. LEGIBILITY OF THE MANUSCRIPT CHB
36. DISCREPANCY OVERLAY CHB	37. DESCRIPTIVE REPORT R.J.P.	38. FIELD INSPECTION PHOTOGRAPHS R.J.P.	39. FORMS R.J.P.
40. REVIEWER Charles H. Bishop 1/24/69		SUPERVISOR, REVIEW SECTION OR UNIT <i>Albert C. Rauck, Jr.</i> Albert C. Rauck, Jr.	
41. REMARKS (See attached sheet)			
FIELD COMPLETION ADDITIONS AND CORRECTIONS TO THE MANUSCRIPT			
42. Additions and corrections furnished by the field completion survey have been applied to the manuscript. The manuscript is now complete except as noted under item 43.			
COMPILER L. O. Neterer, Jr. March 1969		SUPERVISOR <i>Albert C. Rauck, Jr.</i> Albert C. Rauck, Jr.	
Reviewed By: R.J. Pate April 1971			
43. REMARKS Field Edit Applied From: Field Edit Ozalid and Photographs 66-L-8482 thru 8484 & 66-L-8300. Additional Corrections From Ratio Photos: 70-E-6055 & 70-E-6056. R.J.P.			

FIELD EDIT REPORT
SOUTHWEST COAST OF PUERTO RICO
JOB PH-6708
MAP T-13135

52. ADEQUACY OF COMPILATION

Compilation was adequate. Interior detail was, perhaps, not carried far enough, but alongshore and offshore features were, in most cases, correctly delineated. In the vicinity of Playa de Guayanilla, several ditches are shown as tidal, when in reality they are intermittent drainage. The mouth of Rio de Guayanilla has undergone considerable change since photography but this was natural change and not a result of inadequate compilation. A large mangrove area and a "floods" area were also omitted, as were a few small ponds, and three piers in ruins. Two new piers were added to the map.

54. RECOMMENDATIONS

None.

55. EXAMINATION OF PROOF COPY

Sr. Oscar Padilla, Urb. Estella Box 28, Guayanilla, Puerto Rico, will be happy to examine a proof copy of the map. Sr. Padilla is the senior harbor pilot of Bahía de Guayanilla.

56. GEOGRAPHIC NAMES

All authorities consulted agree that all the names on this map are correct and in current local use. One additional name is recommended: EL FARO at 66° 47.1, 18° 00.0. It applies to a small fishing village. The name is shown on the U.S.G.S. quadrangle YAUCO, P.R. and is agreed upon by all the below listed authorities.

Authorities consulted are listed below.

- I. Sr. Oscar Padilla
Urb. Estella Box 28
Guayanilla, Puerto Rico

Sr. Padilla is the senior harbor pilot of Bahía de Guayanilla and has been a resident for 64 years.

- II. Sr. Gilberto Castro Pérez
Bo Playa
Guayanilla, Puerto Rico

Sr. Castro is a boat operator and has been a local resident for nine years.

III. Sr. Daniel Santiago
Bo Playa
Guayanilla, Puerto Rico

Sr. Santiago is a harbor pilot and has been a local resident for three years. He is retired from the U.S. Merchant Service.

IV. Sr. Faustino Allongo
R.F.D. 2 639 H
Ponce, Puerto Rico

Sr. Allongo is a contractor and has been a local resident and fisherman for twenty years.

V. Sr. Ramon Torres Echevarria
Ext. Mariani A-110
Ponce, Puerto Rico

Sr. Torres is a mechanical engineer and prominent local sports fisherman. He has been a resident for 36 years.

The harbor pilots mentioned above are licensed by the Puerto Rican Pilot Service.

57. LANDMARKS AND NONFLOATING AIDS TO NAVIGATION

There are no fixed aids to navigation within the limits of this map. One landmark was recommended for charting and one was deleted. These were reported on Form 567 and Form 152 and forwarded with field edit data.

58. ROCKS, REEFS, SHOALS AND FOUL AREAS

A few bare rocks were overlooked in the vicinity of Punta Verraco. Shoals were adequately compiled and a few typical depths were given by the field editor where practicable. There are no reefs or foul areas on this map.

The ledge shown on the current edition of chart 928 could not be discerned. There is a shallow area in the vicinity, from 1.0 to 3.0 feet deep, extending from approx. 66° 47'.0 to 66° 47'.7. This area has a hard bottom but is covered with a layer of silt and grass. It does not uncover at the sounding datum.

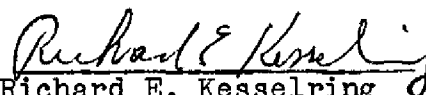
59. PHOTOGRAPHY

Photography consisted of 1:5000 ratio matte prints and 1:15,000 and 1:30,000 color contact prints. Photo-

graphy adequately permitted clarification of details not mapped and allowed confirmation of the compilation.

60. DISPOSITION OF DATA

All data was forwarded to the Photo Branch, Atlantic Marine Center. Copies of the Field Edit, Form 567's and Form 526's were transmitted to the ship Whiting.


Richard E. Kesselring
Surveying Technician

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REVIEW REPORT

SHORELINE

T-13135

61. GENERAL STATEMENT

See summary which is page 6 of the Descriptive Report.

62. COMPARISON WITH REGISTERED SURVEYS

A visual comparison was made with a copy of registered survey No. 2468, 1:20,000 scale dated 1900. There is general agreement between the two surveys.

Registered survey No. 2468 is superseded by T-13135 for nautical charting purposes.

63. COMPARISON WITH MAPS OF OTHER AGENCIES

A visual comparison was made with USGS Punta Verraco, PR, and Yanco, PR both dated 1958 and at 1:20,000 scale. The shoreline on the quadrangles is generalized but seems to be in agreement with this survey. There are no reefs on this survey and the shoal areas appear to be in agreement.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS

A comparison was made with H-9031, 1:5,000, sounding overlay No. 2 dated 11/1/72. Since the shoreline was taken from the advance manuscript, there are no differences.

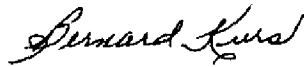
65. COMPARISON WITH NAUTICAL CHARTS

Comparison was made with Chart 928, March 9, 1972 at 1:10,000 scale. The chart is in general agreement except where man made and natural change would occur. Differences are noted on the comparison print in red.

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS

This survey meets project instructions ^{and} ~~and appears to meet~~ the National Standards of Map Accuracy.

Reviewed by:



Bernard Kurs
Cartographer

Approved for forwarding:



Melvin J. Umbach, CDR, NOAA
Chief, Coastal Mapping Division
Atlantic Marine Center

Approved:



Alfred C. Holmes
RADM, NOAA
Director, Atlantic Marine Center

Approved:



Chief, Photogrammetric Branch



Chief, Coastal Mapping Division

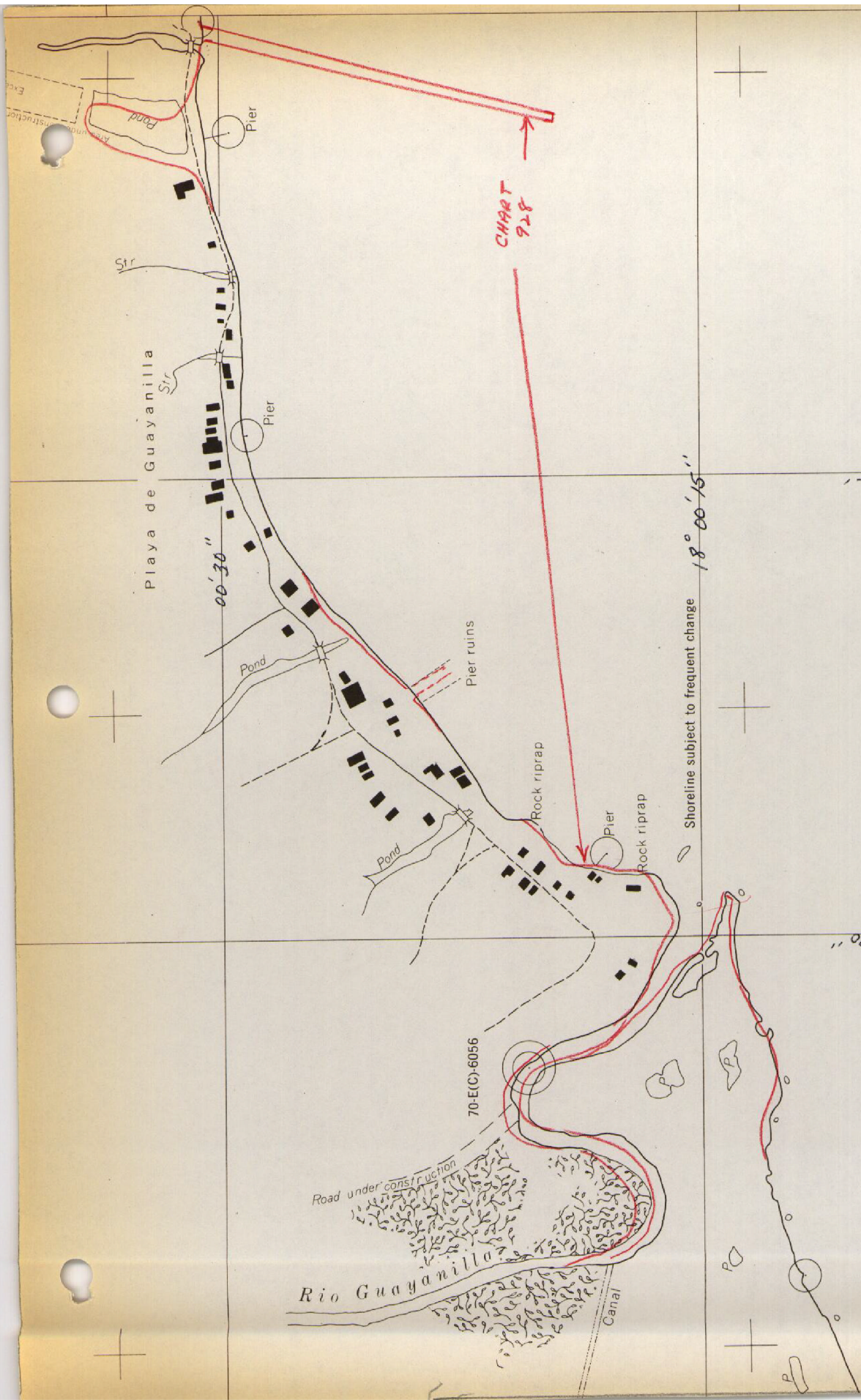
46° 00' 22"

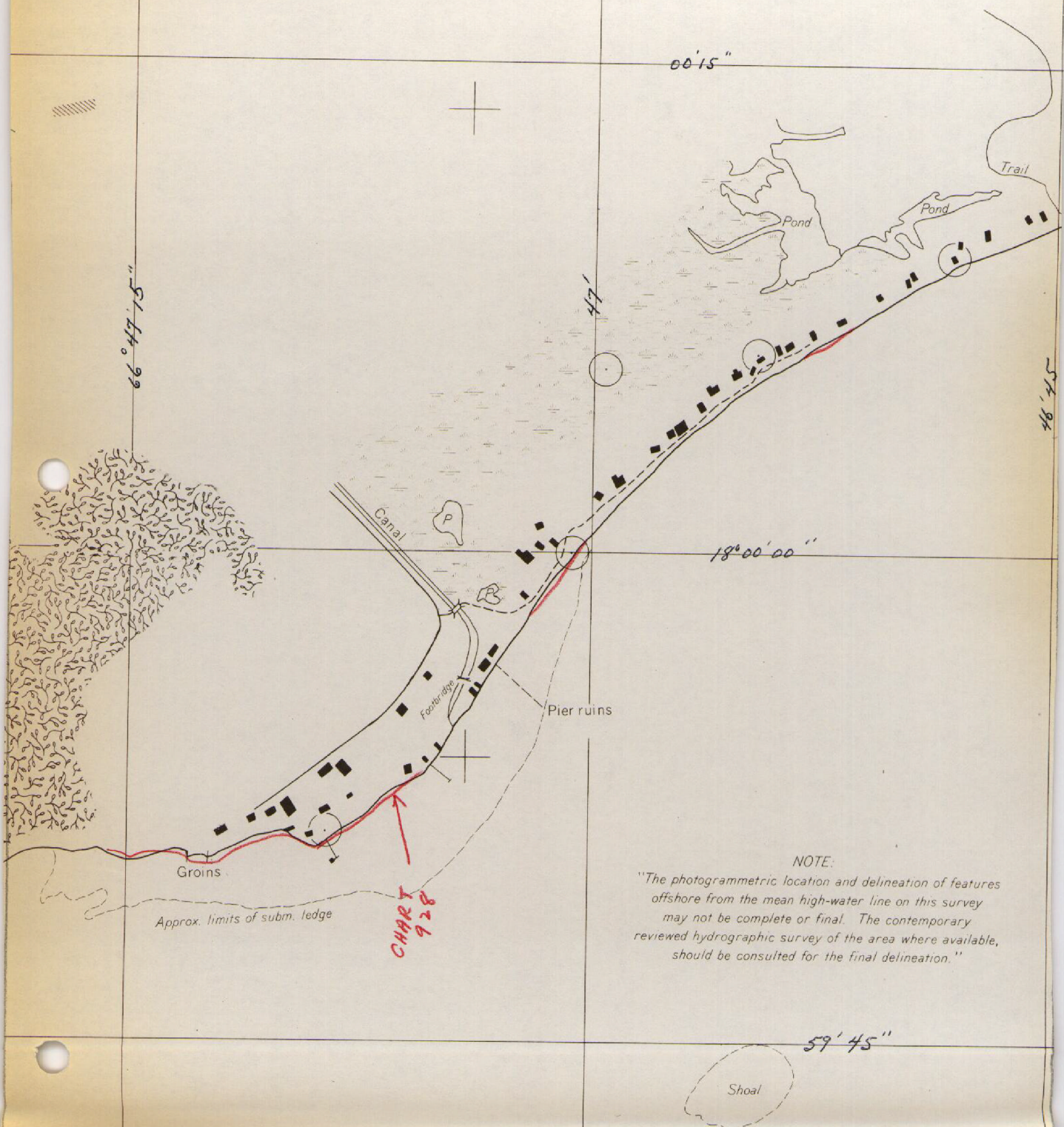
T-13135

46° 15'

66° 46' 30"

18° 00' 15" Shoreline subject to frequent change





NOTE:
 "The photogrammetric location and delineation of features offshore from the mean high-water line on this survey may not be complete or final. The contemporary reviewed hydrographic survey of the area where available, should be consulted for the final delineation."

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T-13135

47°30"

47°45"

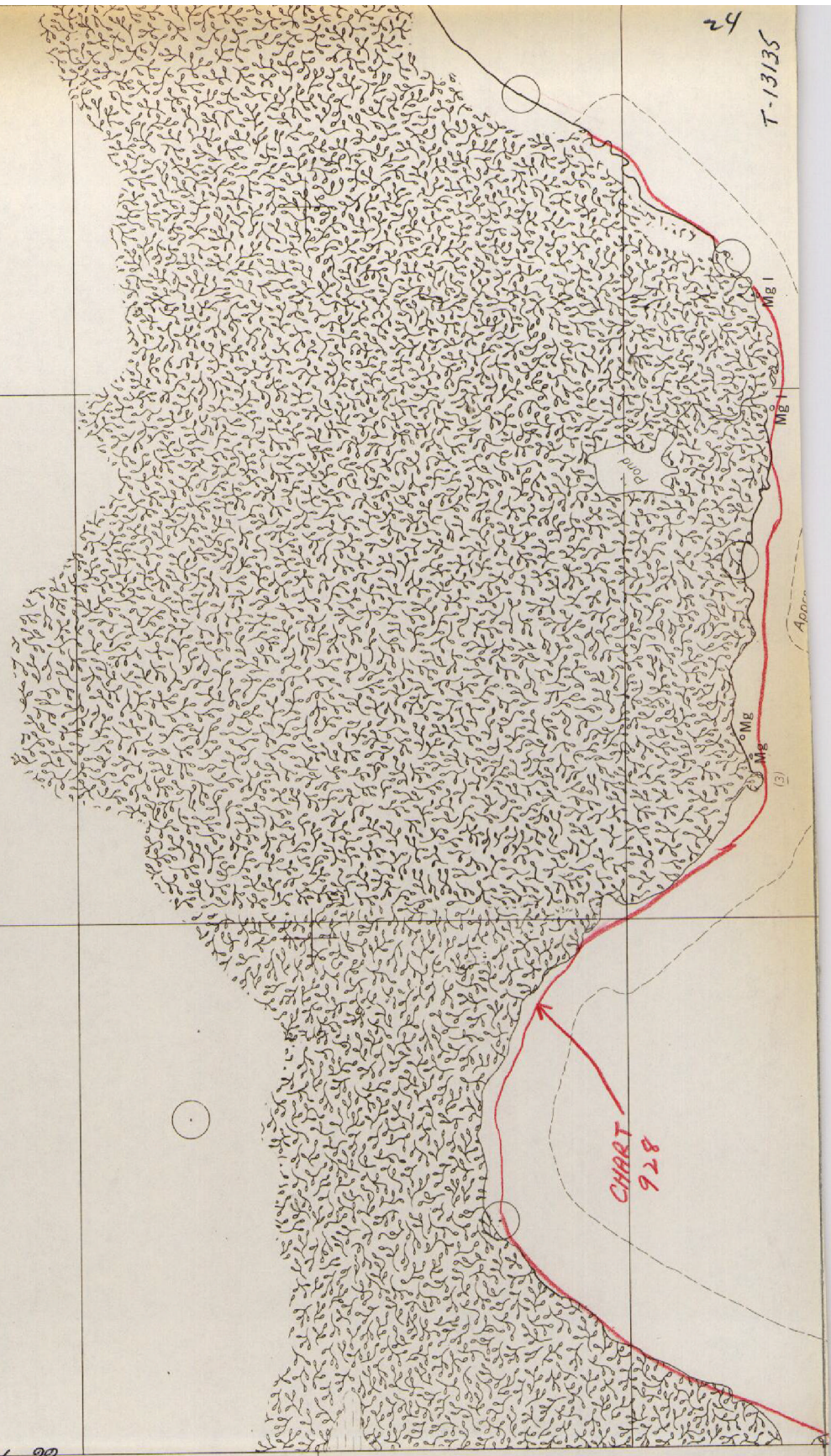
66°48'00"

18°00'00"

1:60,000 FT.

59°45"

CHART
928



25

y=58,000 FT.

59'30"

59'15"
y=56,000 FT.

CHART 928

66-L(C)-8484

Puerto de Guayan

T-13135

17°59'00"

66°48'00"

x=374,000 FT. 47'45"

INDEX TO ADJOINING SHEETS JOB PH-6708

00"
15"
00"

subm. ledge

26



59' 30"



17° 59' 15"



CHART 928

Punta Verraco

Trail (Priv)

illa

T-13135

47' 30"

x=376,000 FT.

66° 47' 15"

x=378,000 FT.

47'

NOTE: Unlabeled circles are photogrammetric plot points; not map features

